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Society Reports.

TRANSACTIONS OF THE OBSTETRICAL SOCIETY OF CINCINNATI.

Stated Meeting, May 10, 1883.

The President, Dr. J. Trush, in the chair.

Dr. Cleveland reported a case of

HYDATIDIFORM CYSTS.

December 10th, 1882, Mrs. M., æt. 27, came to my office. She was anæmic and emaciated, excited and anxious in her manner. She gave the following history in regard to herself: She was the mother of two healthy children, five and two years old respectively. She had always enjoyed good health until about three months ago. Five months ago menstruation had ceased, but she had not grown large as she usually had, and she had not felt life. She had had a show several times during the last five months, but it did not seem to be natural. She had been especially distressed during the last three months, by palpitation of the heart and shortness of breath; and that she vomited daily more or less, and no food would stay on her stomach. Her emaciation verified her statement of imperfect nutrition. These conditions of nausea, palpitation and difficult respiration had been growing gradually worse and worse until they were well nigh unendurable. It was for these latter symptoms that she came to consult me. The outlook appeared discouraging.

Her respiration was 20 per minute and labored, pulse 110, feeble and irregular. The air entered her lungs everywhere, but there were coarse mucus rales heard everywhere. There was a bruit synchronous with the first sound of the heart that appeared to be mitral, but there was so much irregularity of action, and the patient was so anæmic that it was thought to be functional. The os was soft and patulous. The uterus was enlarged and could be readily felt by bimanual examination. It appeared to be enlarged to about the fourth month of pregnancy. The face and lower extremities were œdematous. The diagnosis was pregnancy, and the disturbing symptoms anæmia, emaciation, dyspnœa, palpitation and œdema, were supposed to be due to the prostrating effects of the persistent vomiting. She told me that for several weeks she had observed that

she had a glairy looking discharge that resembled the white of an egg; the discharge was not continuous, but that it came away occasionally. This, at the time, was not properly interpreted. Different methods were resorted to, to control the vomiting, but without satisfactory results. The above described symptoms, gradually became more pronounced, until January 2d of this year, when matters culminated.

At the time I saw her, January 2d, she had hemorrhage of uterine origin and periodic pain referred to the back and hypogastrium, evidently uterine. The os was dilated to allow the introduction of the finger, but nothing could be determined except that there was threatened abortion. In the afternoon the case had assumed such a form, that it was necessary to do something radical on account of the increased hemorrhage, accordingly it was determined to dilate and remove the contents of the uterus as soon as possible. Two fingers were finally introduced, when a condition was found that puzzled me. A soft substance was felt and gave to the finger the impression of clotted blood, that easily broke down to pressure. The stringy sensation that I got by touch I took to be the fibrin of the blood. Finally the whole hand, up to the thumb, was introduced. This soft friable mass extended as far as I could reach and no fœtus or placenta could anywhere be felt. Removing a handful it was found to be a gelatinous vesiculated substance mingled with blood. This was scooped away with the hand, the uterus contracting well under the stimulus of the hand. The mass was eventually all removed, much of it was lost, but what was gathered together filled a small sized chamber. Being the first case of the kind that I had seen I was at first at a loss to know what I had. After some inquiry and looking up the subject I knew I had a case of hydatidiform cysts or vesicles. Unfortunately the specimen was lost. While I was gone home to get a vessel to hold the hydatids, some officious meddler emptied the contents of the vessel, so I am unable to state positively whether I had hydatids or hydatidiform cysts. There is little doubt, however, but that it was the latter as the former is exceedingly rare, some even doubting whether true hydatids of the uterus ever occur. The name was originally given to it under the idea that the grape-like vesicles were true hydatids, similar to those that develop in the liver and other structures, but this idea has been long ago exploded, and now we know that the disease called by different names is a degeneration of the chorion. How caused is not definitely known. It may be from death of fœtus, or from morbid state of the decidua, or as some think from specific disease. The ordinary history and progress of this disease, as given in the books, is very well illustrated by the case reported.

Aside from the clinical importance of these cases the medico-legal bearing of this class of cases may be of the utmost importance. If the etiology of this disease, as above stated, is correct, it is essentially a

disease of pregnancy. A microscopic examination would readily determine whether the ecchinoccus was present. Unfounded suspicion might arise from the fact of a patient expelling a mass of hydatids months after impregnation. Serious mistakes might thus be made in the case of widows. McClintock has especially pointed out this, he says that hydatids may be retained in utero for many months or years, or a portion only may be expelled and the residue may throw out a fresh crop of vesicles to be thrown off at some future time. Some cases are related in Churchill that would seem to prove this form of growth could come on independent of impregnation, but, in the light of more recent investigation, it is altogether probable that there was some mistake in diagnosis or interpretation.

The condition of my patient was very grave after the removal of the mass of hydatids. She had a chill and peritonitis developed, and for six days it appeared very doubtful whether she would recover. She rallied very slowly and it was fully three months before she had gained her accustomed health. She is not as well at present as before the false conception. To-day I had an opportunity to examine the patient who affords the subject of this report. I had not examined her since her recovery from the attack of peritonitis. I found involution to be complete, what I had not discovered before, I found there was a thickening or growth of the broad ligament of the left side, involving the ovary and holding the uterus firmly in position; by tilting this growth the uterus would move with it. I do not know whether this existed before the attack of peritonitis or not, or whether it is the result of the inflammatory trouble; tenderness and pain were principally referred to the left iliac region during the attack.

DISCUSSION.

Dr. Wright reported a case he had some years ago: A lady residing in an adjacent city, with the history of an abortion six weeks previous, or at least that was the presumption, had been having hemorrhages. Without making an examination, and looking upon it as a case in which a portion of the placenta was retained, she was put on a tonic course of treatment, from which there resulted no improvement. He then dilated the os, swept out the contents of the uterus, in which was a mass of hydatidiform cysts as large as the two fists, mingled with a quantity of broken down material. The patient improved, and in three weeks returned home. In a short time, however, the hemorrhage returned. The same treatment was repeated with an ultimate recovery.

In answer to question could not state the dimensions of the abdomen, as the case was only recalled during the reading of the paper.

Dr. Palmer referred to the instances of hydatidiform degeneration of the ovum which he had seen. In none was there the least suspicion of any taint. He mentioned this, as it is stated by some authorities that

this constitutional vice was the cause. In all, the uterus was much enlarged beyond that which we find in the same duration of utero-gestation. This is usually an important diagnostic sign. There was also hæmorrhage, copious, watery, albuminous discharge from the uterus. The uterine body was dough-like to touch per vaginam. The diagnosis in these cases is always more or less obscure, till portions of the hydatid mass are expelled, or can be removed. But a history of early pregnancy, with undue uterine enlargement, hæmorrhage, copious leucorrhoea, and a doughy sensation in the uterine body, were very strong evidences of the existence of this condition. There can be no question that uterine hydatids are an evidence of conception, and the morbid condition was a proliferative degeneration of the chorion villi, which might affect the whole surface, or only a portion of it. Under the latter circumstances, gestation might go on till term, and a healthy fetus be delivered, a portion only of the chorion showing hydatidiform degeneration. Usually, when the physician's attention is called to cases of this kind, the uterus has manifested a disposition to expel the contents, and there has been more or less hæmorrhage; the cervical canal will be found more or less obliterated. Dilatation by tents, or otherwise, except by fingers, is not ordinarily required. But if the uterus was greatly enlarged and enlarging, and the general condition bespoke symptoms of local disturbance—the uterus not acting, and the evidence clear that such masses were present—artificial dilatation by tents (tupelo) or the rubber bag was called for to facilitate emptying of the uterus, after which ergot was indicated.

Dr. Miles had had a patient supposed to be eight months pregnant, in which the uterus was enormously distended. There were present irritation of the stomach, a marked condition of anæmia and profuse hemorrage. When he saw her the uterus was dilated sufficiently to admit two fingers. There was no indication of a child but instead there was communicated to the fingers a doughy, dull fluctuating feeling most characteristic of hydatidiform cysts. The uterus was immediately dilated and introducing the hand a large quantity, about a bucket full of cysts in clusters about the size of grapes, was removed. The patient was very much prostrated. Stimulants and ergot were given and after six or eight hours she began to rally. Her recovery was slow almost a year elapsed before she regained her former health.

In this case besides the hemorrhages there were periodical pains and large discharges of mucous the latter resulting from the bursting of the cysts under the force of the contraction of the uterus. He had seen one other case in consultation which had presented similar symptoms. He thought that as soon as the diagnosis was certainly made out, the uterus should be dilated and emptied of its contents at once. Otherwise there will be from the distention of the abdomen consequent irritation of the stomach, vomiting and indigestion resulting in anæmia, all of which

favors a condition of feeble muscular power followed by inertion of the uterus and uterine hemorrhage. Therefore as soon as the diagnosis can be made the uterus should be dilated and emptied of its contents, as there is less danger in forcibly dilating the uterus and removal of the hydatids than waiting for natural labor pains to expell them.

Dr. Trush desired to ask if members, who had related cases of this disease, had observed the baloon-shaped cervex pointed out by Schroeder and others as somewhat characteristic of the anomaly in question.

Dr. Cleveland, in closing the discussion, said that in regard to the question of the President, as to the comparative growth of the uterus in this class of cases, the rule is as has been stated in respect to the growth of the uterus. In his own experience he could only speak of this one case. In this case the growth of the uterus corresponded to the period of pregnancy to which she was supposed to have advanced. During the last month, however, it seemed to have grown more rapidly. The best method of treating this class of cases has been touched upon. The trouble is in making a diagnosis. The cases are so rare that we rarely suspect that we have a case until we have occular demonstration of its existence, what to do is then no longer a question. If, however, in the earlier stages of the cystic growth it were possible to make a diagnosis, he would think it best to empty the uterus of its contents as soon as possible, for the condition is a pathological one, and has a very pernicious effect on the health of the patient, as the case reported and the history of these cases show, and there is more risk in allowing these cysts to remain than in removing them.

Dr. Trush reported on

Hypodermic Injections of Morphine in Puerperal Eclampsia.

Whatever may be the pathology of the convulsive seizures, occurring in a certain per centage of pregnant, parturient and puerperal females, there can be no manner of doubt that the treatment of these exceedingly alarming and fatal attacks by hypodermic injections of morphine is eminently successful; in witness whereof I beg to report the following cases:

Case I.—Mrs. D. S. W., æt. about 22 years, eight months advanced in her first pregnancy, complained of severe and persistant headache and occasional attacks of dizziness; urine, albuminous; slight œdema of ankles during day and of face in morning on rising.

Saline purgatives, diuretics of the same character and a few doses of potassium bromide relieved the more urgent symptoms and patient went on to her normal end of gestation. Taken in labor on the 11th of August 1882, she complained again of very severe headache; albuminuria persistant; considerable œdema. Fearful of convulsions, the salines were again brought into requisition and in addition liberal doses of chloral

hydrate in combination with patassium bromide exhibited. After the lapse of 10 or 12 hours, the headache so far from having been relieved was, if possible, still more intense; but little progress had been made in the labor and the stage of dilatation promised to be quite protracted. At this juncture, I gave patient a hypodermic injection of morphine with atropia; gr. $\frac{1}{4}$ of the former and the $\frac{1}{100}$ gr. of the latter. In a few minutes the headache and other distressing symptoms were gone, but returned again with their former violence some three hours later and again were subdued by a similar hypodermic injection of morphine and atropia. In the mean time the dilatation progressed, slowly, but steadily, and patient in every other way was in satisfactory condition. Presently the headache become troublesome again and some mistiness of sight was also complained of; the os uteri was now almost sufficiently dilated to admit of the passage of the small fœtal head. A third hypodermic injection was proposed and patient clamorous for its use, but her mother who had been from the first opposed to this sort of medication, "never having seen anything of the kind done before in confinement cases and she had seen a good deal, having had eight children of her own," etc., etc., positively objected and the young husband sustained his mother-in-law. While this argument was going on the patient had a pain rather more severe than any one previously and there—the first convulsive seizure was at hand. It was not violent and the patient speedily returned to consciousness. The hypodermic injection even now could not be used, as both husband and mother-in-law were perfectly convinced the patient was being killed by these very injections. The dilatation of the os being such that the forceps could be passed without special risk of laceration, preparations for its employment were immediately made, but before it could be adjusted a second convulsion supervened. Immediately upon cessation of the paroxyms the forceps extraction of a living child was rapidly and safely accomplished, and the entire labor completed before patient became conscious again, which occurred in perhaps half an hour thereafter. Three or four hours later the old distressing headache. This time all opposition was overruled and the hypodermic injection of morphine administered. As during the labor, the patient speedily became quite comfortable and was able to enjoy some liquid nourishment. The kidneys and bowels were, of course, kept active, but in spite of the diligent use of remedies to this end, two more hypodermic injections had to be given, though at much longer intervals before the ominous headache ceased to return. Patient otherwise did well and made a good recovery.

CASE II.—Mrs. C. T., æt. about 24 years; seen in consultation at 2 o'clock, a.m., March 13th, last, because of severe convulsions. The attending physician, Dr. Carrick, reported that he delivered the patient some twelve hours previously, naturally, after a moderately severe labor;

that patient had made no complaint, either during, or immediately upon completion of the labor, of headache, or other distress forshadowing the approach of eclampsia, that, however, an hour or so later, a convulsive seizure took place; that these attacks were of moderate intensity at first and with rather long intervals between paroxysms, but had been gradually growing more and more severe with corresponding increase in frequency of recurrence; that for several hours the patient had not been conscious between seizures; that at midnight he had bled her from the arm abstracting about a quart of blood, which, together with the wasting during the labor, would swell the total loss of blood to fully two pints and a half. Aside from this, he had given patient a large dose of potassium bromide and chloral hydrate; had also given her a saline purgative, yet despite these measures the convulsions had increased in frequency and in severity. During the first half hour of my presence, patient had two most violent convulsions; was profoundly comatose between paroxysms; pupils contracted between and dilating and contracting alternately without change of light, during attacks; pulse upwards of 140 per minute, small, rather wiry; respiration extremely labored between seizures,—apparently from excessive accumulation of fluids in the upper air passages, great quantities of a frothy, bloody mucus issuing from the mouth,— and during attacks absolutely and completely suppressed, the countenance then assuming a perfectly livid appearance. Under these circumstances chloroform by inhalation seemed entirely out of the question, and as patient could not swallow, and enemata were not retained, hypodermic medication was the only resource left. Half a grain of morphine with $\frac{1}{40}$ gr. of atropia was therefore injected under the skin of the abdomen. One more convulsion, and only one, occurred, and this shortly after the injection had been made. In about one-fourth of an hour, the frothing from the mouth had entirely disappeared; the breathing was greatly improved, the pulse had dropped down to less than 120 per minute and was of good volume and force. Correspondingly, the duskiness of the countenance had disappeared and the patient seemed to be merely in a profound sleep. Before noon she awoke and was conscious and rational by night. She made a rapid recovery, without further untoward manifestations.

CASE III.—Mrs. C. J., *alias* C. W., æt. 23, believed to be within about one month of the normal termination of her second pregnancy: having aborted in the early weeks of her first pregnancy something like a year or eighteen months previously. Had felt indisposed for a day or two, but was about as usual; then experienced pain low down the back and over the womb in front. Believing herself in labor she sent for a midwife, but was told by this person that she was troubled with false pains and that her confinement would probably not occur for a month yet. Towards evening of this day the 17th of April last, the patient was

seized with convulsions. The midwife was again sent for, but on perceiving the nature of the difficulty ran off (so stated) and was seen no more. She had given the patient some kind of medicine—what, could not be ascertained—at her morning visit, which it was claimed, brought on vomiting and then spasms. Patient, it was stated, "came to" at first after the spells, (convulsions) but from about 8 o'clock on had not known anybody, but was able to swallow up to 12 o'clock, midnight. When seen by me about 2 o'clock, a.m., of the 18th, the patient was reported to have had between fifteen and twenty convulsions; they recurred now about every 15 minutes; were exceedingly violent and protracted; the tongue had been severely bitten, the face was livid; pupils contracted; breathing sterterous; pulse 140 to 150 per minute, small, but hard; patient completely comatose. Uterine tumor very hard, between as well as during convulsions; inferior segment of uterus with presenting part of fœtus, the head, low down in the excavation; os dilated for passage of index finger; membranes evidently ruptured; no fætal heart sounds, or fœtal movements discernible. Decided to give patient the benefit of hypodermic injections of morphine and atropia, and therefore prepared a solution of ½ gr. of former with gr. $\frac{1}{40}$ of the latter and injected the same upon the abdominal surface. While making inquiries and examining the patient, etc., she had two convulsions; shortly after the injection of the morphine she had a third; then three-fourths of an hour elapsed, when she had a fourth seizure, but much milder than the other three. Finding the os very resisting, I injected gr. $\frac{1}{8}$ of morphine with $\frac{1}{120}$ gr. of atropia into the border of the os and now sent out for pure, half gr. morphine powders and I injected one of these on renewed convulsive manifestations again, upon the abdomen. It was now an hour and a half since the first injection had been given. From this time until 7.30 a.m., a period of 4 hours, the patient was not disturbed, but then had another light paroxysm. As the os was dilated to the extent of about two inches, and the child appeared quite small, I did not repeat the hypodermic injection, but proceeded to extract the child with forceps, and accomplished this object without difficulty. The child was found to be quite immature, corresponding about with a seven months' gestation; it was dead and evidently had been dead for many hours. Patient had no further convulsions; but was quite delirious during the following night; was partially conscious next morning the 19th; fairly so on the 20th, though somewhat dazed. Having been removed to the Cincinnati Hospital I did not see patient again after the 20th, but was informed by the attending physician, Dr. Taylor, that she was more or less delirious at night for nearly a week, then however made a perfect recovery.

We have here three recoveries from puerperal eclampsia, occurring under somewhat dissimilar circumstances, but subjected to the same form of medication, viz.: the hypodermic injections of morphine, to

which remedy, I have no hesitancy in proclaiming, the favorable results were mainly due.

In case I, with marked albuminuria, the convulsions might doubtless have been entirely obviated, had I been permitted to employ the morphine injections as I desired. I am also convinced that this patient would have suffered from post-partum convulsions if the remedy had not been administered. Chloroform by inhalation, here, might have exerted the same salutary influence, but it certainly could not have done better. Chloral had failed. Bloodletting in the decidedly anæmic patient could not have been thought of.

In case II, the convulsions occurred in a plethoric (vascular plathora) woman, but post-partum and after a considerable amount of blood had been lost; the venesection ten hours later, so far from quelling the convulsions seemed rather to intensify these seizures. The patient, at the moment she received the hypodermic injection was in a most unpromising situation; and here the atropia, I believe, was of "real", nay of "great" service; viz., in speedily drying up the profuse secretions of mucus which literally threatened to drown the patient.

In case III, the convulsions probably initiated the labor; this taking place permaturely. Inhalations of chloroform with the state of the circulation and respiration as I found it, were, to my mind, decidedly objectionable, and bleeding of the rather frail, certainly not plethoric, woman seemed also out of place; hypodermic injections of morphine, etc., again therefore were about the only resource. And here also I am persuaded the atropia was a valuable addition, not so much by reason of its antisialagogue action, but as a cardiac stimulant, and, perhaps as a mollifier of organic muscular fiber.

Now, while I am unreservedly in favor of the employment of this remedy, hypodermic injections of morphine, in puerperal eclampsia, I cannot persuade myself of the entire safety of those large doses, one and a half and two grains used and recommended by Drs. Clark(1) and Faust(2) and would hence deem it preferable to adhere to smaller doses. Why employ these large and I may say, dangerous, doses, when much smaller ones, as shown in this report, will answer the purpose. In case III, which certainly was well calculated to test the powers of the remedy, two half grain doses at the interval of an hour and a half, with the one-sixth, between them, sufficed to subdue the paroxysms. Better repeat the smaller dose than employ the large and possibly poisonous quantity.

DISCUSSION.

Dr. Palmer congratulated the President on the favorable results obtained in his three cases of puerperal eclampsia. He thought the com-

1. American Journal of Obstetrics, July, 1880, p. 533.
2. *Ibid*, April, 1881, p. 416.

bination of atropia and morphia a good one. Morphia hypodermically, he believed to be applicable to more cases of this disease than any other remedy. In many, especially in spare, not very full-blooded women, and those of the nervous temperament, it could always be given, at least in the earlier manifestations of the disease. In any robust, plethoric women, and particularly if seen after one or more convulsions, where the brain had already experienced some direct ill effects of the convulsive attacks, then blood-letting should precede the administration of morphia. After great or prolonged coma following convulsions, he could conceive of its doing great harm. Notwithstanding the recommendation of Dr. Clarke, of Oswego, and others, to the administration of large doses (1–2 grs.), hypodemically, he must regard them as attended with danger. It is impossible to rid the system of the effects of an over-dose, while it is a very easy matter to repeat, even at short inervals, small or moderate-sized doses. Under most circumstances, ¼ gr. was a proper dose, he thought, to commence with.

Dr. Cleveland thought that the hypodermic injection of morphia the best method of treatment in the majority of these cases. He congratulated the reporter on the favorable results in the cases reported. While he though that morphia should be used freely in these cases, if used at all, he would not dare to use the heroic doses gr. ij–iij, that had been recommended by some. He had been in the habit of using atropia in combination with the morphia, as had been recommended by the essayist. He had had some experience that lead him to believe that morphia given in gr. ½ doses is not entirely free from danger, where evidence of narcotism was a dangerous feature, though fortunately it did not result fatally.

Dr. Trush, in closing the discussion, remarked that he did not wish to be understood as claiming that hypodermic injections of morphine could save all cases, for he had seen one single convulsion prove fatal, merely that morphine thus used was about the best single remedy at our disposal in this dread disease. In plethoric cases he would certainly have recourse to venesection first and then follow up with the hypodermic injection of morphine.

Case of Recto-Vaginal Fistula.

Dr. Palmer reported a case of recto-vaginal fistula which had required repeated operations before a final closing was secured. What was peculiar in reference to the case was the fact that it had not resulted from trauma, but arose from an inflammatory ulcer (non-specific) on the rectal side, where it appeared after stretching of the anal sphincter through the speculum (patient anæsthetized), as infundifuliform in shape, one-and-a-half inch in length, and one inch in breadth. The first operations on the vagina greatly diminished its size, but a small orifice, the size of a large probe, remained on that side, and much larger on the rectal. Closure

was finally effected by paring the edges on both vaginal and rectal surfaces, and stitching the former with silver, the latter with silk.

Authorities speak very unsatisfactorily in reference to the subject of recto-vaginal fistula. Compared with vesico-vaginal fistula, instances are rare, and these few almost invariably are of traumatic origin.

Very little mention is made of the treatment of this form of vaginal fistula. The operation is very much more apt to fail and need repetition, than vesical fistula. The reasons chiefly are the undue action of the sphincters, and the almost impossibility of preventing the contact and entrance of fæcal matter and gasses within the lips of the opposing surfaces. These substance prevent healing. On which account, if the fistula can be gotten at through the rectum, it should be operated from that side alone, or in conjunction with the vaginal side. An excellent recommendation has been made to split up the perineum to the fistulous opening, then pare the surfaces, and bring all together. But this is adapted only to those cases where the opening is within the lower third of the vagina.

ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL SOCIETY.

Stated Meeting, March 15th, 1883.

The President, Dr. Papin, in the Chair.

Lacerated Cervix Uteri.

Dr. Barrett.—If the society desires, I will report some cases of operation for lacerated cervix. I believe that with the exception of Dr. Pallen I was the first man who ever operated upon a case of this kind. My first case, I think, was in 1869 or 1870, at the City Hospital, and I have been operating upon these cases from time to time ever since. I operated on a case in North St. Louis some time ago, in which the patient had been confined two years before the time that I first saw her. She then had a chronic cellulitis, and an inflammation that, judging from the history of the case, had existed from the time of her confinement some two years before. When she came to me I found that the neck was lacerated bilaterally down to the vaginal junction on both sides. The pelvic roof was hard and the uterus was immovable, and the os was lying laterally across the pelvis, probably to one side and very much enlarged. This woman complained of disturbance of digestion, constipation, headache, backache, loss of appetite, nausea, and was exceedingly nervous and hysterical. There was no eversion of the lips. I operated in this case without any preparation, and did'nt see her after the operation until I took out the sutures. After that she came to the office occasionally, every month or two, and reported herself improving. She was considerably emaciated when I operated. After this I saw nothing more of her

until about two months ago—it is now two years and a half since I operated. She came back, and I found that the uterus was perfectly movable and in position. She had gained flesh; all her pains had left her; her appetite had improved; and I think we may say, as far as her uterine condition is concerned, that she is restored to health. Now this is a case in which the uterus was fixed, and in which I operated during the existence of subacute cellulitis, and in which there was no eversion, and the operation was nevertheless followed by good results. Some six months ago I operated in a case that was somewhat different from the first case. Dr. Gill left this case in my hands when he went to Europe. The woman was suffering with menorrhagia, and the doctor took me down to see the case, expressing the apprehension when he took me down there that the woman was suffering from cancer of the uterus. I examined her, and saw that it was a laceration, and convinced him of the fact, I believe, before he went away. The woman was bleeding constantly, and was very anemic; her appetite was gone; she was nervous and neuralgic; had backaches, headaches, and general symptoms which characterize these cases. In this case the neck was lacerated bilaterally, and the lips were enormously hypertrophied, and rolled out from the distension of the Nabothian glands: they were so large that when I took a knife, or scarifier, and stuck it into the neck of the uterus, it seemed to be honey-combed or full of spaces, so that as I cut I felt the tissue crackle as the knife went through; and after scarifying, an immense quantity of albuminous, white-of-egg discharge ran out of these distended glands. The body of the uterus in this case was five or six inches deep. The enlargement was principally confined to the neck. I didn't give her much preparatory treatment. I used hot water, and scarified the neck from time to time, opening those glands. This had little influence, in my opinion, in reducing the size of the neck. The hot water did some good perhaps. Perhaps the neck was somewhat smaller when I operated than when I first saw it, but she had improved to no great extent. I scraped out the cavity of the uterus and modified the hemorrhage—in fact that checked the flow of blood; but her menstruation was still excessive. After scraping out the uterus a couple of times, I closed up the laceration of the neck while the glands were distended, and while the neck was perhaps two or three times as large as it would be in its natural condition. The uterus, which was then retroverted, I put into position and introduced a pessary. I saw the woman some months since, and the appearance of the neck was normal, the cavity of the uterus and the depth of the uterus were normal, her menstruation was normal, and she is relieved.

Dr. McPheeters.—How many children had she had?

Dr. Barrett.—Three or four. She has grown children; she is well advanced in life, and this laceration had possibly existed a long time.

Another case of a different kind came under my observation about two years ago, at St. Joseph. The patient had been under the treatment of various doctors for a long time. She had a retroverted uterus, and a laceration extending almost, but not quite, to the vaginal junction upon one side; the neck of the uterus was not enlarged, and there was no eversion of the lips; the body of the uterus was enlarged and turned backwards; one of the ovaries was enlarged and tender along the posterior cul-de-sac. She had had iodine and other applications made to the uterus, and pessaries introduced, until she was sick of pessaries and local applications. Of course as soon as a pessary was inserted it impinged against the sore ovary and gave her pain; this made her worse, and the pessary had to be removed; a new one was then put in, and so on, and this had been the woman's experience for a number of years. Now the edges of the laceration were covered with mucous membrane. I could detect a trace of cellulitis on the side corresponding to the laceration; the broad ligament was somewhat tender; the uterus was not quite immovable, and was somewhat drawn to one side, very slightly. I closed the laceration, scraped out the uterus, applied iodine, and reduced the size of the uterus somewhat in this way; and then put in a pessary and kept the uterus in place, and I was enabled to do so without giving her pain. That woman immediately picked up in flesh, strength and spirits, and gained twenty or thirty pounds, I think, in the course of two or three months. She has been well ever since. Now these are a few of a great many cases that I have operated upon, and I have picked them out to illustrate the different classes of cases in which this operation may be performed, the different kinds of cases in which this operation is called for. There seems to be a difference of opinion among physicians as to whether the operation ought to be performed or not, and there is a wide difference of opinion as to the classes of cases in which the operation will be useful—and there is altogether a want of explanation as to the cause of the symptoms in these cases. I suggest these questions for the discussion of the society. I have my own opinion in regard to the causation of this trouble, and there is no question in my mind as to the utility of the operation in proper cases.

Dr. Papin.—Would you be kind enough to describe the way in which you operate. I know you are a pupil of Emmet, but I would like to have a statement of your method of operating.

Dr. Barrett.—I operate as Emmet does. I put the woman in the left lateral position, and introduce Sims' speculum, simply steady the uterus with an ordinary tenaculum, scarify the edges of the fissure with a pair of scissors, and begin at the bottom of the angle of the wound and stitch it up. I would not think of hitching a vulcellum to the uterus as some men do, nor put the needle into the uterus and draw through a wire and pull the uterus down for the purpose of scarifying it. I think that the

uterus ought to be disturbed as little as possible, because there is in almost all of these cases some trace of chronic cellulitis. We rarely find a case which is not complicated by cellulitis, and it is always an important factor: there is always some lingering trace of this cellulitis remaining; and I think when a man hitches something to the uterus, and pulls it down, he runs a risk of reviving the inflammation. I cannot do the operation quite so quickly, nor quite so nicely, but I can do it quickly enough and well enough for any special purpose. It is easier to pull the uterus down, but it is not safe nor scientific. I have never had any hemorrhage in these cases. I bring the parts together and then introduce the sutures. I have never used any but the silver wire sutures.

Dr. Papin.—What has been your experience in these cases as to subsequent pregnancies?

Dr. Barret.—Well, I was trying to think of the number of cases of sterile women I had operated on who had subsequently become pregnant—quite a number—but I can only remember two at this moment; I know there are several more. I know there are instances in which women had been sterile for a number of years, six or eight years, and who became pregnant after the operation; so that I think that the closing up of these wounds conduces to conception.

Dr. Papin.—What is the subsequent effect of parturition upon these cases?

Dr. Barrett.—Whether they recur or not I cannot say. In one case it has not; of the other cases many of them have passed from under my observation.

Dr. S. G. Moses.—In the last number of the *American Journal of Obstetrics* this matter was under discussion; and Mr. Mundé speaks of a number of cases where this operation has been performed, and the patients have been confined afterwards with no rupture whatever, and no abnormal affects whatever.

Dr. Barrett.—I do not see why a rupture should take place. The neck returns to its normal condition after the operation, and it seems to me that a womb would not be more likly to tear than that in a woman who had never been confined.

Dr. McPheeters.—How many sutures do you put in?

Dr. Barrett.—That depends upon the length of the tear—from three to five.

Dr. Papin.—In a double laceration, how do you sew up the os; to the opening, or clear across?

Dr. Barrett.—No, sir; not clear across. I leave an opening large enough to allow menstruation without obstruction. You can close it pretty close, and there will be an opening sufficiently large in my judgment. That has been my experience. In some cases I was afraid that I had closed the cervix up too far and made the opening too narrow, but after-

wards I found that I had not. I don't think you can close it too close. I think the suture is liable to tear out. I have under treatment a woman who was operated on in Chicago in which this doesn't seem to be the case, however. The opening is very small, exceedingly small, and she is suffering from dysmenorrhea. I am inclined to think that the dysmenorrhea is caused to a considerable extent by the contraction in this case. This woman has been in a much better condition since the operation than she was before. She has improved in health and has gained flesh.

Dr. Montgomery.—In placing the sutures, do you embrace the whole uterine wall or place them superficially?

Dr. Barrett.—I embrace the whole thickness of the wall, perhaps an eighth of an inch from the edge of the scarified surface. I use silver wire sutures, and the needle that I find most convenient for this operation is the short trocar needle which was suggested by Dr. Hodgen. It is made of an ordinary sewing needle, which you can break to a proper length, and whet the point on a common whetstone. It is cheap, and the best needle that I know of to penetrate a hard substance like the neck of the uterus; it goes through very readily.

Dr. S. G. Moses.—Does the laceration cause abortion?

Dr. Barrett.—I think it does cause abortions.

Dr. Papin.—I remember a case that I attended some years ago, in which there is little doubt that abortion was due to the laceration of the cervix, produced in a very rapid labor.

Dr. Engelmann.—In regard to this matter, in cases of double laceration, of having too complete a union after the operation, I have had two instances of that kind. In very large lacerations, where we have to go into the vaginal wall to make the cervix, we are very likely in attempting to make a proper sized uterine canal sometimes to pare a little closely, and in two such instances I have found when ready to remove the sutures—and I may say that I never have any occasion to have the patient meddled with or to examine her before the removal of the sutures—I have in these two instances found that union had taken place completely across. Of course the union at the os at that time is only an agglutination, or at least is comparatively recent, and sometimes a strip of adhesions, and I have in those cases been enabled with a probe to separate the edges and make just the kind of canal that I wished. I may say that I look upon this as rather an advantage, because I was enabled to make the canal of just a suitable size, the ordinary size of the uterine canal, a little larger than to admit the probe, perhaps—I may say an ordinary sized catheter. I think that would be about the satisfactory size for the purpose of exit and ingress. I think that Dr. Barrett is perfectly correct with regard to the statement that the condition of the os for labor after the operation is much better than it was before, and that the cicatricial tissue in no way interferes with the succeeding labor, although I must

confess I have not observed any delivery in such cases. I don't know what the condition is, but I do know that in my last operations the union has usually been such that at the following examination, say in four or five days after taking out the stitches, there has not been a sign of the line of union; the only marks that were left were the slight marks of the silk sutures, but no trace of the line of union. The union was so perfect that no cicatricial tissue even at that time showed itself; the transverse lines of the sutures were the only ones left, and judging by that, if at so early a period there were no traces left, I should think there would certainly be no interference from it at a later date. The cervix in this case was enlarged, bleeding, hard—in a sort of cartilaginous condition. Within some two weeks after the operation, it had the appearance of a natural cervix in shape and feel; the swollen, tumefied, enlarged and cartilaginous condition seemed to have disappeared with the same rapidity. In regard to the propriety of operating, I don't think there is any doubt of it. The operation has evidently been overdone, and for that reason is underrated by a great many. There is no one operation that gives such brilliant, such immediate and striking results as this one of Emmet. Undoubtedly you have all seen large cases of lacerations, bilateral lacerations of the cervix, without any symptoms that might be referred to the laceration—in fact without any symptoms whatsoever. It is not every laceration which produces symptoms; and then again there is a catarrhal condition of the uterus accompanying many lacerations, which must be treated in order to have satisfactory results from the closure of the laceration itself. When the catarrhal condition is relieved, we are in a better position to treat the laceration. There are some instances where the nervous symptoms predominate; there are pelvic pains, etc., and after the operation for the laceration they will be relieved; but when a catarrhal condition accompanies it, it must be relieved in order to get satisfactory results from the operation—and this is one of the reasons in my opinion, one of the principal reasons, that there have been cases in which the operation has produced no good results or trifling results. Only one of the conditions has been relieved. I have now under observation a lady who after the birth of her first child began to suffer with very characteristic symptoms, so that when spoken to by the husband in reference to the case I thought at once that we were dealing with a laceration of the cervix, and such proved to be the case: it was a characteristic large bilateral laceration of the cervix. She suffered intensely with backache and pelvic pains, nervousness, insomnia. It was but months since the birth of her child, and was getting into the warm weather. For a time she had no treatment, simply going away in the summer, and by fall all the symptoms had disappeared. The laceration of course remained the same, but she felt well and strong. She could walk up stairs and carry her child; she could ride, drive, all did not produce backache, nervous

ness or pelvic pains, and was healthy and strong notwithstanding this large laceration, which in the first place had given her those characteristic symptoms. The reason I mention this case is because she has since aborted. It was last June that I first saw her, before leaving the city, and she was then in good health. She conceived it seems in January, and has just aborted a male child. This will be in harmony with the opinion before expressed; but she has not suffered any symptoms whatsoever. During the progress of the abortion the laceration looked terrible, and there is no local improvement whatsoever. That is one of these cases which I presume need not be operated upon. Her health is perfect in every way; there is neither nervousness nor pains of any kind whatsoever, in spite of the presence of this large laceration. I am watching the case and expect these pains to develop slowly, as I think very often, if the pains do not present themselves at once, or even for six months after the occurrence of the laceration, the pains frequently develop, although there are cases which go on for years without any trouble. Still it is a most satisfactory operation, because often patients who are miserable, bedridden and suffering, immediately after the operation get up and say they feel like different persons—the pains have disappeared. All that remains is the soreness due to the operation. I can only repeat that I have seen no other operation which has given such satisfactory, such permanent and such good results; but the operation is certainly not necessary in every instance, and in some cases is absolutely unsuccessful, because the accompanying conditions have not been attended to.

With regard to the sutures; I had long used the silver sutures, but within the last six months, or probably the last four months, I have used nothing but heavy silk, and I have been better satisfied with it, not that it gives any better results, but because it is much more rapidly manipulated, and less troublesome in removing, and gives at least the same satisfactory result. In using the wire sutures I introduced them all first and then fastened them; whereas, as I at present do the operation, using the silk sutures, I tie each suture as it is introduced, and I find it is a great deal more rapid.

Dr. G. A. Moses.—You pull the uterus down?

Dr. Engelmann.—Yes, sir.

Dr. Ford.—I regard this subject as an exceedingly interesting one. It has certainly been so to me during the last six or seven years. In the first place the most important subject in connection with the operation is the indications for the operation. When are we to operate? What do we expect to acccomplish? I regard Emmet's operation as one of the most distinctive and important improvements that has been introduced into gynecology since the Sims-Bozeman work on electricity in troubles in the vesico-vaginal system. The indications which are manifest it seems to me are: First, hysteria and general de-nutrition. There can be but

little doubt of the fact that laceration of the womb, even when it is not double, when it is unilateral, causes an impairment of the action of the digestive organs. There is very apt to be associated with it an amount of uterine congestion; and it is probable that there will be at the same time a cellulitis, or ovaritis, and these troubles constantly increase in the course of years. Another indication is the presence of mental troubles. These are very distinct in many cases, and I think their occurrence is a positive indication. I have seen cases where there was most marked melancholia. In one case, the wife of a former patient of mine in the country, the lady suffered from continued melancholia of a most profound character. The gentleman wrote to me stating the particulars of the case. I wrote back to have the attending physician examine the uterus, and if he was not then satisfied send the lady to me. She came to me, and on examination, I found a double laceration. She was a young woman, about thirty-two years of age. She had had her last child six years before, and it was during the birth of this child that the laceration occurred. I recognized the melancholia as the result of the laceration. She was anemic to a considerable extent, and her appetite was inadequate and capricious. After a certain amount of preparation I operated upon her, and sent her home. The attacks of melancholia were less frequent but didn't disappear altogether, and I then suspected that there was something else back of it, probably an abscess of the liver, as she had some history of dysentery, and had complained of pain in the head and right shoulder, and she had undoubtedly been subject to malarial influence. As she visited me again, I passed a needle into the liver in three places, but got nothing. The attacks continue to be less and less frequent, however. It was about three years ago that I operated. She became pregnant and was delivered of a fine boy, and there was not the slightest trace of a laceration afterwards. The boy is now six or seven months old.

Dr. G. A. Moses.—How about the melancholia?

Dr. Ford.—It has almost entirely disappeared. I haven't heard that she has been troubled with it for three or four months, but I can't say that it is altogether gone. There is an element in the determination when to perform Emmet's operation that in my opinion is very important, the danger of the establishment of epithelioma in the cicatrix. I do most undoubtedly believe that epithelioma of the neck of the womb is due to primary laceration. I think we are fully authorized in performing these operations when there are well marked symptoms. It is quite possible that a woman will go a number of years with a unilateral laceration without any very important symptoms; but they certainly do show themselves in the great majority of cases. I would remark that a great deal of care is necessary in the preparation of these subjects for operation. I always

take especial pains in preparing them by the use of the douche and other proper treatment.

I think myself that grave mistakes have frequently been made in the diagnosis of these cases, and that many a cervix has been amputated where there was nothing but a benign fungus growth, springing from an everted mucous membrane, the bottom of a laceration, which growths were supposed to be epithelioma of considerable size. I had a case of that character some years ago, in which I was very much at fault at first; in this case there was a laceration. In double laceration I place the woman upon the side, and operate downwards. I use Bozeman's angular knives and scissors. I begin at one margin of the wound and proceed to the main angle of the laceration. I use the short straight trocar needle, which is undoubtedly the best, and a good needle-holder. I always use silver wire sutures, and I introduce them all before fastening them. I find no difficulty in introducing them in this way—not so much, I should think, as in attempting to fasten them as we go. After I have completed one side I turn the woman over, and proceed to operate on the other side. I use some mild antiseptic wash for the parts for the first five, six or eight days, two or three times a day. My success in these cases has been excellent. The union has been so complete that the line of union disappears. I operated on a case in which, in addition to laceration of the cervix, there was chronic disease of the heart, and hypertrophy of the liver and dropsy. I had tapped her two or three times before without the use of chloroform. I operated in this case on a double laceration with immense success. In one case, also, I operated on a lady over sixty years of age for a laceration of long standing, and for some years associated with constant bleeding. We found the mucous membrane of the cervix enormously everted; there was cystoma, and distension of the uterus. The procedentia was so marked as to bring the cystocele within the margin of the vulva. After proper preparation I united both sides of the large double laceration and got an excellent result. The union was splendid, and there was a shortening of the anterior wall of the vagina and the erectile tissue of the cystocele. There are many cases in which this operation should be done. I don't know that I ever had a case in which there was a marked recent cellulitis or inflammatory trouble present. I should prefer in such cases to wait until by appropriate measures this condition had been relieved before operating. Undoubtedly a great many cases go for a long time seemingly requiring no operation, but in the course of time the symptoms are developed.

Dr. Barret.—I want to say that there is no case of laceration which ought not to be operated upon, and if any gentleman has any reason to urge why it should not, I would like to have it brought out.

Dr. Ford—I heartily agree with Dr. Barret in that regard. I would operate upon any and every case if I had a chance. My advice always

is to operate. We then run no risk. The simpler the laceration is the more easily it is cured.

Dr. G. A. Moses.—The last remark that Dr. Barret made I was very glad to hear. He says he would like to know of any case of laceration that ought not to be operated upon. I have often felt that every laceration ought to be operated upon, but we must define what we mean by a laceration. I suppose there is no case of parturition unaccompanied by some degree of laceration of the cervix. Now, we have been taught that a laceration is not important, and operation is not indicated until it is accompanied by irritation or some pathological symptoms. A slight laceration I don't suppose is what Dr. Barret means.

Dr. Barret.—Yes, I do; I mean any laceration that is appreciable to the examiner when he makes the examination, if there is any laceration with deformity.

Dr. G. A. Moses.—Any deformity; I consent to that. So far as regards the importance of the operation as mentioned by Drs. Engelmann, Barrett and Ford I agree with them entirely. I don't see why Dr. Ford should take the trouble to turn the patient from one side to the other, unless as a mere matter of personal convenience in operating. I don't see any advantage in it.

Dr. Ford.—It facilitates the operation a great deal.

Dr. G. A. Moses.—Perhaps it does. I have never made the experiment; I don't see how it can be of any benefit exactly. Dr. Engelmann operates in the dorsal decubitis, I believe. In most of the cases that Dr. Barret mentions the laceration had existed some time and the uterus was more or less fixed; in one case especially. Now Goodell lays considerable stress upon the point that all sensitiveness ought to be gotten rid of before operating. Certainly I think this is correct in the great majority of cases. There are circumstances in which we must operate before this has entirely disappeared; but I think we should endeavor to allay the inflammation, and get the uterus in as nearly a normal condition as possible before operating, and then we should disturb it as little as possible. I think the largest portion of the risk is incurred in violent disturbance of the uterus. The only case in which I have had any trouble, and I have operated in several very severe cases, was one of those where there was tenderness remaining, although the case had been under treatment some time, and I disliked to operate exceedingly at the time I did. I moved the organ more than usual, though not to any great extent. In that case a violent cellulitis was set up, but the union was perfect so far as the operation was concerned. The inflammation set up threatened the patient's life for some days, so that I am exceedingly careful not only to try and get rid of the sensitiveness of the organ before operating, but to reduce the amount of disturbance during the operation to a minimum.

Dr. Barret.—There was no acute inflammation in my cases. They were long standing cases.

Dr. Gehrung.—If the proposition made by the previous speakers, Drs. Ford and Barret, be true, namely: "that any and every laceration of the cervix should be repaired," then it is a waste of time and labor to study the symptoms indicating an operation. The symptoms so ably described by Dr. Ford may appear, at first sight, to be an unerring guide, when and when not to operate. Every one of these symptoms and all combined may, however, be found present in many cases uncomplicated by lacerations, in women who have never been pregnant and even in virgins. While, as has just been mentioned by Dr. Engelmann, there are cases of extensive laceration with few or no symptoms indicating the presence of such a lesion, or where the symptoms apparently belonging to cervical laceration have disappeared and the patients got well to all appearance without an operation. This fully coincides with my experience. Thus we see that cervical laceration has few or no pathognomonic symptoms, except the finding of the laceration itself, and that the symptoms generally met with in these cases are rather those of the accompanying, consequent or accidental complications.

Deep lacerations, with or without symptoms, with their almost inevitable accompaniment of more or less pelvic cellulitis and sequelæ of the generally consequent subinvolution, should always be repaired, either as a curative or prophylactic means, for it is almost an absolute fact that sooner or later trouble will follow if this is not done. More superficial lacerations should be operated or not, according to the curability by other and simpler means of the symptoms which they uphold or which accompany them. If this precept is disregarded the operation will frequently prove a failure in regard to its curative effect, as the other means will have to be employed subseqently, as though the operation had not been performed. Sometimes the most trivial laceration may require an operation on account of uterine nervousness, etc., caused by it. If laceration of the cervix uteri is not an inciter of epithelioma, it may at least promote an outburst of the cachexia or invite the latter to this site.

Concerning the question of re-establishment of fertility by this operation, I should conclude from my experience and published statistics that it is not to be considered as more than accidentally successful. In some cases laceration appears to be the cause of enforced sterility or of repeated miscarriages; in others it appears, according to my experience, to be the cause of increased fecundity, without more than an ordinary proportion of miscarriages. The question has frequently arisen in my mind, whether the number of children born by women who have undergone trachelorrhaphy is not in the minority compared with the number of children born by women equally lacerated and who have not been operated upon. Yet this view, if correct, should not deter us from

operating, where otherwise found desirable, since the invalid has a greater claim on our assistance that a possible prospective offspring, unless otherwise decided by the person or persons concerned. I operate mostly in the left lateral semi-prone position, with the knife, the short, slightly curved (Emmet's) needle and silver wire.

Dr. Papin.— Have you any statistics on the point about which you have just spoken as to the probability of the operation causing sterility?

Dr. Gehrung.—I have no statistics that the operation produces sterility particularly. My opinion is founded more upon the fact that it is rare to have a pregnancy follow the operation. There are very few cases on record. A certain doctor in an article in the *American Journal of Obstetrics* reported that he could find only six or eight cases. Probably there are many more that have not been reported, as it has not been supposed to be such an extraordinary subject, but out of the many hundreds or thousands of operations that have been performed, eight cases are a very small showing. As I mentioned before, I know a good many cases of extensive laceration where there was almost too much fertility, so that it seems to me that the laceration seems to conduce to some physiological condition which favors conception.

Dr. S. G. Moses.—Didn't these cases abort very readily?

Dr. Gehrung.—No, sir. In most of the cases that I have in my mind now there has never been any tendency to abortion.

Dr. S. G. Moses.— I am sorry that I didn't bring the last number of the Obstetrical Journal. This matter was discussed before the Baltimore Obstetrical Society, and the question of the production of sterility by the operation was brought up, and a number of cases are mentioned in which women have become pregnant after the operation, and Goodell, I think it was, said he had operated in some one hundred and seventy-four cases, at least it was over a hundred, and a number of these had become pregnant subsequently. Several others spoke of the cases Goodell had operated on, and whom they delivered after the operation without any trouble whatever. It did not seem to be considered a cause of sterility however.

Dr. Papin.—In my own experience many of those I operated on did not abort. Several of them were undoubtedly sterile before the operation and have borne children since. Out of six decidedly sterile four have since borne children.

Dr. Engelmann.-- Objection has been made to the dragging down of the uterus, and I would like to refer to it because to me it is an important point. I look upon that objection as theoretical, and if the gentlemen have experienced bad results from it, I don't understand it. I am very sorry for it; but I must say that since I have done that, I find that not only one feature of the method of operating, but I do it in all cases in all operations, and I have done it since last fall; and I never had such

success before; and I must say that all those operations have been such as I have referred to. I have not been obliged to use any injections, or to look at them until I removed the stitches, and the patients have been in first-class condition; as, for example, I mentioned one that got up on the third day, and hadn't the slightest trace of trouble from it afterwards, there was a most perfect result, as there was in all the other cases, and not only of simple laceration of the cervix, but in one instance there was laceration of the cervix with cystocele, and in another there was laceration of the cervix and rectocele both at the same time. I never use force in pulling the uterus down. I pull it down gently.

THE OBSTETRICAL SOCIETY OF LONDON.

Stated Meeting, Wednesday, May 2, 1883.

The President, H. GERVIS, M.D., in the Chair.

EXTRA-UTERINE FŒTATION.— *Dr. J. A. Mansell-Mulloin* showed a specimen of abdominal gestation. The fœtus, of about four months' developed, was contained in a sac bounded by the Fallopian tube and broad ligament in front, and the intestines above and behind. In its primary stage, he thought it had probably been tubo-ovarian. The patient died from internal hemorrhage from the placental site. The points of interest in these cases were these: (1) the patient had recovered from an attack of internal hemorrhage and peritonitis six weeks previously: (2) the intestines were so adherent over the cyst that, had its removal been attempted, it would have been impossible to complete the operation.

Mr. Lawson Tait said that, in such a case, all that was wanted was the removal of the fœtus and drainage of the cyst. He regretted that this had not been done. He had operated on seven such cases, of which six had recovered.

Dr. Heywood Smith said the patient was admitted in too low a state for operation; and the *post mortem* examination showed that any operation would have failed.

Dr. Braxton Hicks said that the treatment advocated by Mr. Tait was not new; and recorded cases showed that it was not so simple or so safe as had been said.

Dr. Edis thought operation was advisable when the diagnosis was clear; but the difficulty was in diagnosis. He agreed with Mr. Tait that an exploratory incision was justifiable when the symptoms were grave enough.

The President remarked on the comparative safety conferred by antisepticism in peritoneal surgery. He thought that the condition of the patient, rather than the presence of adhesions, was the bar to operation in this case.

Dr. Carter said that the patient was in too low a state for opera-

tion, and, from the *post mortem* examination, he thought it would have been unsuccessful.

Cystic Degeneration of Uterine Fibroid.—*Dr. Carter* showed a uterine fibroid, which had undergone cystic degeneration. It grew from the fundus uteri, by a pedical one inch and a half long and half an inch in diameter. It derived its blood-supply mainly from extensive adhesions. It weighed three pounds and three-quarters, and contained seven pints of fluid, in all weighing about thirteen pounds. The patient from whom he removed it had done well.

Cystic Diseases of Ovaries.—*Dr. Carter* showed two ovaries removed from a patient, and made up of a number of small cysts. They weighed one pound and twelve ounces respectively. They had been jammed down into the pelvis behind the uterus, and had been taken for uterine fibroids. The patient had done well.

Dr. Lawson Tait said the ovarian disease was one of a very rare kind, described by Rokitansky, Ritchie, and himself.

Submucous Fibroids.—*The President* showed three myo-fibro-mata, removed from the interior of the uterus.

A Cardiac Acephalic Fœtus.—*Dr. F. E. Cockell, junior*, showed a monstrosity of this kind.

Ischiopagus.—*Dr. Chalmers* exhibited (for Dr. Hurford) a monster of this kind.

Hydrosalpinx.—*Mr. Lawson Tait* showed a specimen of hydrosalpinx, removed from a patient from whom, four years previously, an ovarian tumor had been removed.

Pyosalpinx.—*Mr. Lawson Tait* also showed a specimen of pyosalpinx, removed from a recently married woman. The symptoms had followed marriage, and he thought the disease due to latent gonorrhœa. He thought there must be hundreds of women in London suffering horribly from this disease, and that this operation was not done half often enough

Suppurating Parovarian Cyst.—*Mr. Lawson Tait* also showed a suppurating parovarian cyst, which he had with much difficulty enucleated. Each of the patients from whom the exhibited specimens were taken had done well.

Dr. Edis called attention to Dr. Noeggerath's paper on Latent Gonorrhœa. He (Dr. Edis) thought such cases of frequent occurence, and that operative treatment offered the only hope of relief.

Dr. Fancourt Barnes thought the results of Mr. Tait's operations justified their performance.

Case of Extra-uterine Gestation simulating so-called Missed Labor.—This paper, by *Dr. Rasch*, was then read. The patient, a multipara, aged 29, ceased to menstruate in March 1882. In August, she thought that she quickened. In October, she suffered from pain in the belly; fœtal movements ceased; and there was some hemorrhage

from the vagina. Then followed symptoms said to be due to inflammation of the kidneys and lungs. In December and January, a foul vaginal discharge was noticed. At the end of January, some fœtal bones came away *per vaginam*. At this time, a sound passed six inches into the uterus; and, on washing out the uterus, a pint and a half of fluid was injected into the organ before any returned. The patient died at the end of February. On necropsy, the fœtus was found in a cyst occupying the lower belly, inseparably connected with the pelvic viscera and abdominal wall, and opening into the sigmoid flexure and the uterus, the latter organ being of normal size. The author remarked on the similarity of the phenomena during life—the history of the case, the distance to which the sound entered, and the quantity of fluid which the uterus apparently retained—to those of so-called missed labor. The necropsy showed that removal of the fœtus by laparotomy would have been easy, and he regretted he had not done it.

Mr. Lawson Tait said that the case emphasized the rule that, in obscure cases of abdominal disease, not malignant, the abdomen should be opened.

Dr. Galabin had met with a case much resembling that of Dr. Rasch, except that the cyst did not open into the bowel. In this case, the cervix was dilated with a tent, and then the opening between the cyst and the convexity of the retroflexed uterus, thus settling the diagnosis.

Dr. Philip Jones had attended the patient before she came under the care of Dr. Rasch. He described more fully the early history of the case.

On the Behaviour of the Uterus in Puerperal Eclampsia, as observed in two Cases.—*Dr. Braxton Hicks* remarked that the condition of the pregnant uterus during a series of epileptiform attacks had not been very closely observed, the general idea being that the uterus participated in the general excitement of the muscular system. Passages were quoted from different works on the subject, in illustration of this. The author then described two cases in which he had carefully noticed the action of the uterus. In each of them, coincidently with a convulsion, a powerful and prolonged contraction of the uterus was observed. Between the convulsions, the uterine action was natural. He could not state the exact relationship in point of time between the convulsions and uterine contraction. He did not think that uterine contraction alone caused the convulsion; for, in the most severe cases of tonic or clonic contraction of the uterus, convulsions did not occur. But there might in these cases be increased excitability. It had been suggested that increased force of pains might result from carbonic acid intoxication due to the convulsions. He thought the immediate supervention of uterine contraction on the convulsive paroxysms, and the quietness of uterine action between them, told against this view. The presence of these contractions,

together with the disturbance of the heart and vascular system, and the pupils, showed that the muscles of organic life were liberally affected during the paroxysms of eclampsia. These prolonged and powerful uterine contractions, as well as the carbonic acid poisoning of the mother's blood, were a source of danger to the fœtus; and in its interest, speedy delivery was called for, if it could be affected without harm to the mother.

Dr. Robert Barnes regarded the paper as of extreme value. He did not doubt that the immediate cause of the uterine contraction was the convulsion. Dr. Hicks observations would lead him to reconsider the rule which he had adopted, to reject the *accouchment forcé*, from which he had seen disastrous results. With chloroform and improved operative measures, delivery might be effected early and safely; but the mother must be considered first.

Dr. Graily Hewitt thought Dr. Hicks's observations novel and important. He thought the disturbances of the abdominal and renal circulation, caused by pressure of the gravid uterus on the renal veins, exercised a powerful influence in producing eclampsia. He had found benefit from diminishing this pressure by positional treatment and by unloading the bowels.

Dr. Routh had seen marvellous benefit in puerperal convulsions from placing the patient on her belly and knees, a confirmation of Dr. Hewitt's views.

Dr. Hicks did not recommend force in the delivery of the child. As to the effect of pressure, there was often no albumen in the urine before the first convulsive seizure.—*British Medical Journal.*

OBSTETRICAL SOCIETY OF PHILADELPHA.

Stated Meeting, Thursday, June 7th, 1883.

The President, R. A. Cleemann, M.D., in the Chair.

Dr. Fred C. Sheppard exhibited the uterus and appendages removed post-mortem from a case of

Interstitial or Tubo-Uterine Fœtation,

and read the following report:

Through the courtesy of Dr. George S. Hull, of Chambersburg, Pa., I am enabled to present, this evening, the post-mortem specimens of one of the rarer forms of extra-uterine pregnancy. The history of the case is given in such a clear and complete form by Dr. Hull, that I will read it in his own words:

"April 11, 1883. A few days ago it fell to my lot as Coroner, to hold an inquest on a colored woman who had died suddenly. Vomiting followed by death, together with a history of family troubles, led her friends to suspect her husband of poisoning her.

"About three o'clock a.m., pains had set in in the left inguinal region accompanied by severe vomiting; I could not learn whether the pain preceded the vomiting or *vice-versa*. A physician was sent for; he did not go but sent three one-fourth grain morphia powders. She took one every hour, seemed easier, and the vomiting ceased. At noon, becoming very weak, the doctor was again sent for, responded in person, and found the patient pulseless at the radials; he ascertained that she had been constipated for about a week, and made a diagnosis of obstruction of the bowels; he gave five compound cathartic pills, and ordered an enema. In an hour the patient was dead."

"*Autopsy:* Peritoneum inflamed (recent—no pus), stomach empty, save the pills, which were liquefied. *Intestines* normal. About two quarts of clotted blood were found in the abdominal cavity. The womb was ruptured, a small circular rent in the fundus about the left cornu."

"The uterus was removed and the rent enlarged; a fœtus of about three months with membranes entire was found. The placenta seemed attached at the point of rupture."

"The pregnancy seemed to be interstitial, the tube being involved. The lower half or two-thirds of the uterus was much hypertrophied and contained two or three teaspoonfuls of muco-pus, which could be pressed out at the os uteri. There was no communication between the pus-cavity and the cavity containing the fœtus. The uterus was not adherent to the other organs."

A sketch by Dr. Hull shows the uterus inclined to the right side, the fœtal sac occupying very nearly the normal position of the fundus, and the point of rupture a little to the left of the line of the umbilicus.

"It occurred to my mind that the rupture was spontaneous, causing the vomiting and pain of the night; however, the woman had eaten of sauer-kraut for supper, and it might have caused the vomiting, and that in turn the rupture. The morphia allayed the symptoms for a time, but the hemorrhage was slowly going on, and peritonitis setting in; the former predominating, death took place from loss of blood. She was the mother of one child, and was to all appearances in good health up to the time of the accident."

An examination of this very interesting specimen shows an enlarged womb with a dilated cavity, the walls of which are hypertrophied to a thickness of seven-eighths of an inch; lining this cavity is a structure which appears to be a true uterine decidua; the os is small, with an irregular stellate outline, and is perfectly patulous; the cervix is partially absorbed. The right ovary is small and flattened; the left of about normal size; at the point of entrance of the left Fallopian tube is a large intra-mural cavity, which contained the fœtus; the outer wall of this cavity is exceedingly thinned, and presents ragged edges at the point where rupture took place; to the inner wall are attached some remnants

of the placenta; no communication can be detected between the fœtal cyst and the uterine cavity. The fœtus is apparently of from three to four months and is presented with the membranes unbroken.

To cases of this class the terms interstitial, tubo-uterine, utero-interstitial, and parietal have been applied. Dr. Parry, in his work on "Extra-Uterine Pregnancy," classifies them under the head of "tubo-uterine, or those in which the germ is arrested in that portion of the tube which passes through the uterus." They are very rare. An analysis by Hecker (quoted by Parry), shows twenty-six cases out of two hundred and twenty-two, and Parry in his analysis of five hundred cases of extra-uterine pregnancy, finds but thirty-one of the tubo-uterine variety, but two hundred and thirty of his cases are grouped under the general head of doubtful. Mr. Alban Doran (*Obstet. Trans.*, vol. xxiv., 1882, p. 234) has been able to find but six specimens in all London, though he states that "we see a goodly array of the more frequent tubal form in almost every museum." I will not occupy your time this evening by referring to the question of pathology or of diagnosis, as both points cover the entire ground of extra-uterine pregnancy, and will be discussed in a future paper.

The proper treatment to adopt in these cases is, however, a point of great interest, and merits notice. A ruptured extra-uterine fœtal cyst may cause death instantaneously, as in the case of the English actress mentioned by Dr. Chabazian (*Obstet. Trans.*, 1882, p. 157). "She was taking an ice in the Bois de Bologne, she fell down suddenly, and she was dead." Poisoning being suspected, an autopsy was performed. No trace of poison was detected, but the ruptured pouch of an extra-uterine fœtation showed the cause of death. In this case, of course, there was no time for surgical interference, but in many, as the one reported this evening, an appreciable interval elapses between the first symptoms and the fatal issue. The diagnosis being made, what would be the proper course to pursue? Unquestionably, laparotomy. An exploratory incision would at once reveal the true condition of affairs, and the surgeon could either incise the cyst, turn out the contents, ligate the bleeding points, suture the edges to those of the abdominal wound and establish drainage; or, if thought better, remove entire the uterus and its appendages. Either plan would offer a very fair prospect of recovery, while if left without surgical aid the patient would be doomed to inevitable death.

A number of points of interest present themselves in the study of this interesting case, but the limits of a paper of this character forbid us taking them up. I might merely call your attention to the large quantity of blood; Dr. Hull states about two quarts exuded from a comparatively trifling rent. This fact has been repeatedly commented upon by other observers. Dr. Parry states that some of the most severe hemorrhages occur when the orifices are very small, and cites a number of instances in

which from several pounds to two and a half gallons of blood have been found in the abdominal cavity after rupture of extra-uterine cysts.

In conclusion, let me recall to your mind Dr. Hodge's case. His patient went to the eighth month, labor was brought on by dilating the os uteri, and the child delivered by rupturing the septum between the uterine cavity and the fœtal sac; the child was delivered by the natural passages. The child lived two hours, and the mother made a complete recovery.

Dr. B. F. Baer had examined the specimens, and felt a doubt of its having been the usual form of uterine tubo-gestation. That form is the rarest, and is considered the least dangerous because not so liable to rupture in consequence of having the muscular tissue of the uterine wall to strengthen it. In Dr. Hodge's case the septum of uterine tissue between the uterine cavity and the fœtal sac was so thin that it could be scratched through with the finger. As the case reported by Dr. Sheppard terminated by rupture about the third or fourth month, it resembles a tubal in that particular. The question of operative interference is very interesting. In this case, as ten hours elapsed between the accident and death, an operation would be justifiable if the diagnosis could have been established.

Dr. Alfred Whelen remarked that Miss Neilson lived ten hours after the first shock of her illness, and the published report of the autopsy stated the cause of death to have been rupture of varicose ovarian veins.

Dr. Sheppard, in closing the discussion, remarked that Dr. Parry classes all of this type of cases as tubo-uterine. The sac in this case was undoubtedly in the uterine wall, as the specimen shows. He had not been able to pass a bristle from the uterus into the Fallopian tube. As regards the possibility of the spontaneous stopping of the hemorrhage as a reason for postponing the operation, he would not consider it advisable to wait, for even when the laceration is very small, as in this case, the hemorrhage may, and probably will, be excessive; this hemorrhage is the cause of death in most, if not all, of the cases, and the only chance for the patient is in stopping the hemorrhage and removing the already effused blood. If the diagnosis can be made, laparotomy is justifiable, and would be the only resort. In the report by the French physician to the Obstetrical Society, no name is given, the patient is simply mentioned as an English actress.

Knotted Umbilical Cord.

Dr. Cleemann exhibited for Dr. John A. Hunter an umbilical cord tied into a complete single knot. There was no difference in size of any portion of the cord and there had been no interference with the nutrition of the fœtus. Dr. Hunter had not been present at the birth of the child, but had come in soon afterwards, and in tying the cord and removing the placenta he noticed the knot. In a case reported by Dr. Wm. F. Jenks

to this Society, a failure of the fœtal heart was noticed by auscultation, the child died in utero and the knot in the cord was suggested as a probable cause of the death of the fetus. Such a knot as is seen in Dr. Hunter's case might be formed during parturition if a loop of the cord was around the child's neck and it was loosened and the body allowed to pass through it in the process of extraction.

Dr. Montgomery thought that such a knot, if existing in utero, might develop a murmur that could be discovered by auscultation.

ACUTE HYDRAMNIOS.

Dr E. E. Montgomery remarked that although dropsy of the amnion is a quite frequent condition, that above named is exceedingly rare. For this reason he has felt that the following case was worthy of record. June 4, 1883, he saw Mrs. P., in consultation with Dr. Chase. She was pregnant for the fourth time. In the one preceding this she had miscarried. Her last menstruation occurred December 10, 1882. In her former pregnancies she had been quite small, carrying the fœtus low down. This time the abdomen was larger than formerly at the same period, but she continued without any special discomfort until one week ago, when, without any assignable cause, the abdomen began rapidly to increase in size, and continued to do so. The increase has been attended by pain, tenderness, difficulty in breathing, entire loss of sleep for three days, loss of appetite, and scanty flow of urine. She has been obliged to maintain a sitting posture, as lying down greatly increased the difficulty of breathing. They examined the urine but found it free from albumen. The abdomen was distended more than we would expect to find it at full term. The tumor projected well forward and a little more prominent to the right. It was perfectly regular in outline. The skin of the abdomen was smooth, tense, and glistening, and could not be pinched up over the tumor. It was quite tender to pressure. Short-waved fluctuation was distinct over the whole surface, percussion was dull, a slight tympanitic resonance could be determined in both inguinal regions. No part of the fœtus could be distinguished by abdominal palpation. In fact all the external signs were those of an ovarian tumor. They imagined they heard the heart-sounds, but so indistinctly as to be uncertain. She said she had felt the fœtal movement for several days very slightly. Per vaginam the cervix was found dilated, the os open so as to admit two fingers to enter it. The vertex of a fœtus was felt presenting, and, singularly, was but slightly movable.

Considering the rapid enlargement in a few days, the extreme discomfort of the woman, as well as the imperilled circulation and the extreme improbability of the woman or fœtus surviving until the latter had reached a viable age, they concluded the best course was to induce premature labor, and from the urgent need of relief, to cause it by rupturing the membranes. This he did, and on the evening of the day a still-

born fœtus was extracted. The upper part of the abdomen still continued almost as large as before. Examination per vaginam revealed the membranes of a second child. The rupture of these was followed by a gush and discharge of an enormous quantity of water. The second fœtus and the placenta were soon extracted. The latter was single with two cords. One cord appeared to have only a membranous attachment, but closer examination showed that it had been torn off from the base of the other cord. The quantity of liquor amnii was so great that it soaked through folded quilts, mattress, floor, and ceiling, and dripped upon the floor of the room below. The uterus contracted firmly and the patient was at once relieved. The children were both males, and well developed for the sixth month; the second lived a few minutes.

The fixed position of a fœtus in the os in these cases has been given by McClintock as a sure indication of a plural pregnancy, but I must confess that this did not occur to me at the time, though I was unable to account for the anomaly. The existence of a single placenta in twin pregnancies is said always to be accompanied by children of like sex, this theory is here confirmed as far as is possible by one case. As to the cause of the condition authorities greatly differ. Gervis, in *St. Thomas Hospital Reports*, brings the causes under three heads: 1st. Cases due to inflammatory conditions of the amnion. 2d. Cases where the decidua has been found diseased and hypertrophied, but the amnion healthy. This will cause effusion into the amnion by transudation owing to disturbed circulation. In these cases the fœtus suffers and may atrophy. 3d. It may arise from some maternal blood dyscrasia of uncertain nature, but evidencing itself by the same condition recurring in successive pregnancies in the same patient Puerperal albuminuria may be the cause, and comes under this head. Simpson says disease of the placenta is likely to recur in the same individual. Savage says that an œdematous condition of the placenta is present in all cases of hydramnios. McClintock found a morbid condition of the placenta in every case. Mercier always attributed it to the inflammation of the amnion. Others have ascribed it to obstruction of the fœtal portal circulation, or in the cord giving rise to transudation into the sac from the surface of the cord. Hydramnios greatly endangers the life of the fœtus. Of forty-three cases collected by McClintock, in which children were born where this condition existed, twenty were stillborn, sixteen of these had ceased to live for some days or weeks before labor, eleven of those born living died in a few days. Of thirty-three cases, four mothers died, showing a high maternal mortality.

In this patient the success of the treatment was greater than expected. As the distention had been so rapid, they feared loss of power in the walls of the uterus, and a consequent long first stage and liability to

hemorrhage. It becomes an important question to decide whether they were justified in undertaking so promptly the induction of premature labor, but they felt that the probability of the death of the fœtus and the danger to the mother certainly in this case justifies the procedure.

Dr. B. F. Baer read the following:

SUPPLEMENT TO THE PAPER ON THE EFFECT OF THE OPERATION FOR THE RESTORATION OF THE LACERATED CERVIX UTERI ON FERTILITY, CONFIRMATORY OF THE VIEWS THERE ADVANCED.

He there expressed the conviction, based upon his own experience, that sterility did not follow as a result of the operation, as had been asserted, but because the pathological conditions which almost constantly exist with the laceration were frequently not relieved, and this applied especially to the old cases. He there made this statement: "The longer the time which has elapsed between the occurrence of the injury and its repair (pregnancy being absent during this time), the greater and more permanent will be the changes in and about the uterus, which almost necessarily result in a continuance of the sterility after the cervix has been restored;" and he also said that if five years or more had expired between the occurrence of the injury and its repair, sterility would be likely to remain. In support of this, he reported twenty-seven cases, of which number thirteen had been sterile from six to sixteen years. Of this number, not one has become pregnant since the operation; but of the eight cases in which pregnancy had occurred within two to five years previous to the operation, he reported four that had become pregnant, and he now adds two more.

CASE V.—Mrs. X., aged 32 years, mother of three children, youngest three years of age, complained of severe metrorrhagia every three weeks, and profuse leucorrhea in the intervals, together with a dull aching pain in the lumbar region and pelvis and a sharp spasmodic pain in the bladder, which caused an almost constant desire to micturate. She had lost weight, was anæmic and nervous, and had so many obscure aches and pains that the doctor took refuge in writing the words "general hyperæsthesia from nervous exhaustion." Physical examination showed the perineum to be lacerated to the external sphincter ani muscle, but not through it. The cervix uteri was torn bilaterally to the vaginal attachment, but not much hypertrophied. The body of the uterus was only slightly enlarged, but its cavity was relaxed and granular. On January 20, 1881, after four weeks' preparatory treatment, he operated on the cervix and secured a good result. He was made anxious on the second day after the operation by a rise of the temperature to 102°, which, however, subsided to the normal by the next day. This rise he ascribed to the use of the curette just before operating, which he now thinks ought not to have been done. This is the only instance in which he has observed a perceptible increase of temperature after this operation.

This patient objected so strongly to the use of the catheter that he allowed her to pass her urine spontaneously. Since union was perfect here he allowed his next patient to do the same, with a like good result, and this has been his custom ever since. It was his purpose to restore the perineum, but she was so much benefited that she refused to permit it, and returned to her home in Michigan. A communication received a few weeks since informed him that she was spontaneously delivered at term six months ago.

CASE VI.—Mrs. M., has had three children at term and one miscarriage, the latter two years previous to February, 1878, at which time she first consulted him. She complained of a dragging pain in the back from the sacrum to the nape of the neck, with menorrhagia and leucorrhœa. The neck and body of the uterus were hyperophied, soft, and tender, and the former was badly torn on both sides; the mucous membrane was everted and abraded; sound entered four inches. February 17, 1880, he operated for the lacerated cervix; union was immediate. In his case-book, October 25, 1881: "This patient has been in excellent health since the operation: whereas, I had pursued the ordinary local treatment at intervals during two years before it, with only temporary improvement." She is now in the fifth month of gestation. This makes seventy-five per cent. of pregnancies following the operation of the eight cases of this class.

W. H. H. GITHENS, *Secretary.*

Abstracts and Selections.

I.—OBSTETRIC.

Ulceration of the Os Uteri.—From the *American Medical Journal*, June, 1883.

When we suspect that a woman is suffering from ulceration of the uterus, we propose an examination and forthwith make it, if permitted. We use one of Staufer's speculums, with hollow bulb conductor, stem and check wheel. These speculums are easily introduced, and when in place the vaginal portion of the uterus is well exposed and readily examined.

If we find an ulcerated os, we make the required local application through this same speculum, as follows: ℞ S. H. Kennedy's concentrated acqueous extract of pinus canadensis (dark), one teaspoonfnl; warm water, one tablespoonful. M. Saturate a wad of cotton batting with this solution, and while the speculum is in place, introduce the saturated cotton through it. That the medicated cotton may be placed firmly upon the ulcerated and inflamed os, we put the hollow bulb conductor into the speculum, and with this we push the cotton entirely through the speculum, and against the uterus. We now carefully with-

draw the instrument, leaving the medicated cotton in place. This application may be repeated daily, and after a few times the patient can introduce the speculum and apply the medicine without assistance. As improvement takes place the solution can be made weaker.

For making such examination and application, no speculums equal these. And for local treatment, in such cases, nothing equals S. H. Kennedy's Concentrated Aqueous Extract Pinus Canadensis. Richardson & Co., of this city, furnish it in either form required, dark or white.

It is astonishing how rapidly vaginal and uterine inflammation subside under this plan of treatment. Tender parts grow less sensitive, itchings and smartings are relieved, prolapsus disappears in many cases, leucorrheas are cured, and a general change for the better is enjoyed.—GEORGE C. PITZER, M.D., *Professor of the Theory and Practice of Medicine in the American Medical College, St. Louis, Mo.*

A Spina Bifida Presention.—Mr. Charles Penruddock, M.R.C.S., of Winchcombe, writes:

On April 15th, 1883, I was called by the midwife to attend Mrs. B., who was in labor with her fourth child. Labor commenced at 2 p.m. on the previous day, the pains had been very severe until 10 p.m., but after that time became few and far between, and of very little force. When I saw Mrs. B., the pains appeared to be moderately strong but of short duration. There had been nothing abnormal in her previous confinements. On making an examination it was with great difficulty that I could reach the os, which I found nearly fully dilated; its margins were rather flaccid, and during a "pain" the presenting portion of the child exerted no pressure on them whatever.

From what I could feel of the presentation, I at first thought I had a face to deal with, there being something which very closely resembled the well defined margins of the orbits, beyond this I thought I felt the nose, and still, a little further on, my fingers slipped into what I at once took to be the mouth, only it was somewhat jagged inside as though it were lined with fully developed teeth; I then came across a hand. I passed my hand into the vagina to make a more thorough examination, satisfied myself it was not the face, and at the same time could feel the unmistakable smooth outline of a child's hip, but owing to the above irregularities I was unable to tell clearly what the arrangement of parts could be, and decided to call in my friend and colleague, Mr. William Cox. We came to the conclusion that it was no face, but the lumbar region that presented, and therefore decided to turn. This was accomplished in the usual way, and the feet brought down, only slight difficulty being experienced until the head was being delivered, but with my left forefinger in the child's mouth and my right hand on its occiput, this was soon overcome. The placenta soon followed, and the mother made a good and rapid re-

covery. The child, a female, appeared to have been dead about twelve hours, was fully developed. The head was somewhat hydrocephalic. On further examining the body we found the cause of our not being able to clearly diagnose the presentation, to be a large spina bifida situated in the middle of the lumbar region, and very much resembling to the touch the part for which I had at first mistaken. This case struck me as being very interesting in showing how a diseased condition of a fœtus may confound the diagnosis of the accoucheur.—*British Medical Journal.*

Eucalyptus Oil in Obstetric Practice.—Dr. Sloan awards very high praise (*Progrès Méd.*) to eucalyptus oil as a preventive of puerpueral septicæmia. He recommends it more particularly in cases where there has been effraction of the tissues.

The following mixture may be used to assure uterine contraction after labor:

℞. Sol. morphiæ chlorhydrat (B. Ph.) gtt.–xc.
Tr. nucis vomic., - - f. ʒ ss.
Ext. ergot fl., - - - f. ʒ ij.
Tr. aurantii, - - - - f. ʒ iij.
Aquæ ad., - - - f. ℥ ij.

M.—One drachm may be given every 4 or 6 hours. Twice daily injections containing carbolic acid or permanganate of potash.

According to Dr. Sloan, eucalyptus oil offers the following advantages: It is not poisonous, it is not irritating, and does not coagulate the lochial discharges. Its odor is generally agreeable, and it appears to aid uterine contractions.

The author employs it in forms of pessaries composed as follows:

℞. Ol. eucalypt., - - ʒ iv.
Cera. alb., - - - f. ʒ ij.
Ol. theobrom, - - ʒ iv.

M.—For 12 pessaries. Another combination which sometimes proves too irritating, contains 24 grams of the eucalyptus oil.

Dr. Sloan reports cases where these suppositories have been of great service, and one in particular where subcutaneous injections of the oil diluted with olive oil seemed to save a patient almost ready to succumb.—*Medical and Surgical Reporter.*

Face Presentation.—Dr. Strachan, of Sunderland, writes: "A. W., aged 22, primipara, at full period, was first seen after slight dilatation of os had taken place, the face having barely enlarged the pelvis, although the membranes were ruptured, and the liquor amnii was escaping. The finger touched the right malar bone and orbit. The pains were frequent but not strong, and the patient was hysterical. I gave opium, and left her, and was sent for twelve hours later, when the os was fully dilated,

and the face, which had now descended to about the middle plane of the pelvis, was found presenting, in the first position, the right oblique diameter, with chin backwards towards right sacro-iliac-synchondrosis. As the forehead seemed decidedly to take precedence, I tried gently to make the head rotate on its transverse axis into the first cranial position with the occiput towards the left ilio-pectineal eminence, but did not succeed. This was the method recommended by the late Dr. J. Clark, but is now abandoned. Next, introducing my finger into the mouth, I endeavored to bring down the chin—the proper analogue of the occiput—at the same time assisting the natural rotation into the fourth facial position—the left oblique diameter, with the chin forward. But all my efforts seemed fruitless to move the head in any way, especially as the pains were weak. So, after waiting two or three hours longer to see what course nature intended to adopt, and as the frontomental diameter still remained impacted in the same position, I gave chloroform, and applied the long forceps with double curve; the upper blade, which had to be introduced first, being rather difficult of introduction between the prominences of the face and the maternal parts, so as to avoid injuring either. The long straight forceps are recommended in these cases with the view of better assisting rotation, but in this instance the double-curved ones answered remarkably well, as under rather powerful traction, accompanied by a gentle twist in the desired direction, rotation took place into the fourth position, and the face was born chin forwards, the hollow of the forceps pointing backwards. Had rotation not taken place, the case would most likely have ended in craniotomy. The child was born alive, and although slightly disfigured at the time, with the caput succedaneum over the right cheek and orbit, which were both considerably swollen, it has done well; the mother has also made a good recovery."—*British Medical Journal.*

Placenta Weighing Three Pounds Immediately After Expulsion.—Dr. Beverly Robinson reported the following case to the N. Y. Pathological Society.

"The patient was born on an English vessel in the Atlantic Ocean, thirty-two years ago. Her previous history presented some points of unusual interest. During her girlhood she had always been delicate, was easily fatigued, suffered much from intense headaches, pains in her back, loins, and thighs; had a constant profuse leucorrhœal discharge, but *never menstruated.* Her mother, becoming alarmed at the abscence of this function, consulted many physicians, who prescribed iron, quinine, and various other tonics, but all to no purpose. Although having never experienced a single monthly flow, she married at the age of nineteen, and bore her first child one year later, the weight of which was pronounced by the attending physician to be twelve pounds.

Several months after this birth, the patient noticed that her leucorrhœal discharge increased in amount, once monthly, emitted an exceedingly offensive odor, and, as it issued from the vulva, presented a rust-colored appearance. These peculiar discharges occurred during a period of about eight months, when she again became pregnant, and was delivered in due time of her second child, whose weight, she says, was fifteen pounds. A third, fourth, fifth, sixth, and seventh birth occurred at intervals of little more than one year, the product of each being unusually large children. Her eighth confinement took place in November, 1881, when Dr. Romaine delivered her of a still-born child in an advanced state of putrefaction, the weight of which, taken immediately after birth was ten pounds. Following this birth there was a period of seven months during which the patient enjoyed fairly good health, and the last four months of which she had a regular monthly flow having a duration of three days. This she said, was the first time in her life that she had her courses as other women have them. She again became enceinte, for the ninth time, and was delivered by Dr. Romaine of her ninth child, with the forceps, March 23, 1883. The weight of this child was seven pounds, while the secundines, immediately after expulsion weighed three pounds.

"*Remarks.*—The case is interesting with reference to four points:

"*First.*—Postponement of menstruation until several months after the birth of the first child.

"*Second.*—Menstruation occurring only twelve times in twelve years.

"*Third.*—Birth of nine children during a period of twelve years.

"*Fourth.*—Placenta weighing three pounds while child weighed but seven pounds.—*The Medical Record.*

II.—GYNECIC.

The Treatment of Ovaritis.—By Horatio R. Bigelow, in the M.D., *Medical Record:*

I know of no pathological condition involving the female sexual apparatus which is so unsatisfactory in its treatment, so discouraging to the physician, and so hopeless to the patient, as is ovaritis. Were absolute rest of ovaries and Fallopian tubes possible, and were it equally possible to reach interstitial and peri-oöphoritis by deep massage, we might expect much from expectant treatment. But participating directly or indirectly, as they do, in every functional change, being subjectively and objectively factors in all mental operations, the ovaries cease to be active only with the cessation of life itself. Equally energetic are the tubes, suffering from transmitted influence from intrinsic disease, or engaged in the retrogressive metamorphosis and healing process of menstruation. There is no period of physiological rest. The tubes, until the meno-

pause, are either preparing for the catamenia, or are engaged in recovering from the shock. Whether menstruation be a mere expression of ovulation, or whether it depend upon "the exfoliation of the outermost layers of the proliferated mucous membrane of the uterus," or whether it be an especial prerogative of the Fallopian tubes, the direct effect and the transmitted influence are felt along the entire uterine track. The congested ovary, the hemorrhagic tube, in active operation itself and participating by contiguity of structure with the ovary, and the uricular glands of the uterus, are all sympathizing in a physiologicol event, which may easily be rendered pathological by a want of integrity in the faithful functioning of any part engaged. A past history of constant suffering, of neuralgic aches, painful defecation, a tearing sensation in the ovary, dysmenorrhœa, pains in the back and loins and down the thigh, despondency, dyspepsia and melancholia, a present history of a life miserable and bedridden, and a future which does not bear contemplation, these are common incidents written in the pages of the life history of those who address themselves to the gynecologist for the relief of an oöphoritis. Any chance that offers the slightest hope of respite is eagerly seized. Abdominal section and the removal of the uterine appendages is stripped of terror, and the patient joyously submits to anything that will bring future sunshine. Uteri retroverted or in any way misplaced are supported by pessaries, lacerations are sewed up, vegetations of the endometrium are removed with the curette, cervices are depleted, tonics are administered, but the patient finds no surcease from her suffering. The recurrent peritonitis, or the pains simulating a peritonitis, due to a salpingitis with pus formation in the tube, or to an inflammation or degeneration of the ovary, come around with discouraging regularity and persistency. With as constantly recurring a disregard of the ovary, the seat of the disorder is again relegated to the uterus, the endometrium is again and again medicated, another pessary is applied, the recurrent abdominal inflammation is variously attributed to an old pelvic inflammation, to sympathy, or to a pathological condition within the uterus, and thus and so the woman fades away, carrying along with her the reputation of the physician and the silent evidences of his lack of discrimination.

I do not believe that the cause of this long and varying train of symptoms is ever to be found within the uterus, however misplaced it may be, or in however great a degree its mucous membrane has degenerated. Displaced uteri, lacerations of the cervix, endometritis, endo-cervicitis, and metritis, have a symtomatology in which, while many symptoms are common to each, other and characteristic ones are sure guides in the location of the difficulty. Neither do I believe that any good results can possibly obtain if the secondary conditions are allowed to obscure the primary. The intercurrent dysmenorrhœa accompanying an oöphoritis,

being a mere expression of deranged ovarian function, will not yield to uterine medication, neither will the dysmenorrhœa, associated with a dislocated uterus, yield to the replacement of that organ, provided there be inflammation or degeneration of the ovary. Misplaced uteri are never accompanied by the same alarming series of symptoms. The inconveniences thus occasioned, in uncomplicated cases, yield readily to pessaries, or to medicated tampons. But it so happens, that oöphoritis is most frequently found in connection with some derangement of the uterus, sufficiently well marked to lead up to the belief that this, of itself, is the *fons et origo* of the patient's illness.

The groin pain, the melancholia and dyspepsia are attributable to the retroverted uterus, and will yield, so it is hoped, to the properly anjusted pessary. The great mischief of the pessary is found in the ease with which it is applied, and in the marvellous and oftentimes imaginative good which it is alleged will follow upon its introduction. Pessaries are only exceptionally beneficial. The majority of cases do better without them, and get well faster and with a greater assurance of permanency with medicated tampons. The indiscriminate use of the pessary, and its not infrequent mal-adjustment, are the exciting causes of serious disease. He is a wise man in his generation who, recognizing an oöphoritis, will allow the uterus, no matter however greatly misplaced it may be, to remain just as he happens to find it, and will address himself to the ovary alone; who will assure his patient by a cheerful manner, and will explain to her what he hopes to achieve in the administration of certain remedies. He will much more surely attain this end and the confidence of the woman, by declining to interfere needlessly, by vaginal examination, or by constant attempts to replace the uterus, which only shock her nervous system, and exaggerate the mental disturbance always present. Relieve your patient first of her intolerable suffering and despondency, thus winning her sincere regard, and there will be time enough left to rectify the other matters.

But how shall we relieve the suffering? I protest that I have carried this matter about with me, as a burden, of which I have been unable to disembarrass myself by night or day. A case in my own family, so hydra-headed in its ever-changing symptoms, so irresponsive to treatment, so painful to witness, has invested me with a deep sense of a physicians responsibility in such instances, and with a very painful conviction of my own ignorance. The intense desire to relieve, with complete inability to do so, is a species of punishment about as painful as any that one can undergo. This case has made a more enduring impression because of its association with a retroverted uterus, with a subacute pelvic inflammation, and with the recurring abdominal pain and nausea. I have already so fully described it that I may merely add, that the pain in the right ovary is constant, and sometimes conveys the impression of drag-

ging; the ovary is enlarged and tender, menstruation is insufficient in quantity and attended with much distress, and there is a general condition of great malaise. No local treatment of the uterus, whether of replacement or of internal medication, has given the slightest relief. Absolute rest, electricity, massage, and full feeding, have accomplished something, but the least departure from so strict a regimen sets up the old train of symptoms. Ergot with bromide of potassium, chloride of gold and sodium, the alterative treatment with mercury, and counter-irritation have all been equally unavailing, though a fair and honest trial was given to each. The fact seems to me to be clearly demonstrated that uterine displacement has nothing to do with the distressing symptoms; that the retroversion and oöphoritis are entirely distinct maladies, each characterized by peculiar phenomena and each calling for separate treatment. While it may be an error to postpone an operation for the removal of the uterine appendages until the patient is worn out with her sufferings, it is a very natural timidity to shrink from assuming so grave a responsibility, especially in the case of those within the home circle.

At the suggestion of Dr. P. J. Murphy, of this city, I have been induced to make a trial of rectal suppositories of one-quarter of a grain of iodoform, combined with a small quantity of the alcoholic extract of belladonna, one of these to be used three times a day. In three instances under my own observation, including the case referred to, these suppositories have given me more satisfying results and better grounded hopes of future alleviation than anything else that I know of. Absence from the marital embrace, with proper hyienic and dietetic rules, must be enforced rigidly. The alleviate and sedative properties of iodoform are well known, and in no other disease are its properties brought out so clearly.

The True Relations of Uterine Disease to Sterility.—At the conclusion of the Gulstonian Lectures on the Sterility Women, Dr. Matthews Duncan, makes the following observations with regard to the importance attributed by different authorities to dysmenorrhœa, uterine catarrh, "ulceration," flexions:

To me it appears theoretically reasonable to connect dysmenorrhœa and sterility with rigidity of the cervix, and the opinion that it is so is confirmed by its being actually discovered in most cases. Anyone familiar with the use of increasingly sized bougies in dilating the cervix must recognize the greater force required in dysmenorrhœal than in healthy women, and the increase of painfulness of the process as the force used, slight though it is, increases. The overcoming of this rigidity by temporary dilatation, not the overcoming of a mechanical obstruction, seems to me in some mysterious way to exert a generally beneficial influence on that part of the process of fecundation in which the uterus is implicated during insemination. For it may be held as almost certain that, during

the natural sexual orgasm in coitus, the internal ends of the tubes, which we almost never see but as absolutely closed passages, are temporarily opened inside, and that the same happens to the cervix is not essential for fecundation, it must be held as facilitating it or rendering it more probable. Besides, this opening is an indication that the whole nervous arrangements as well as the physical organs are co-operating to produce the object in view. The opening here pointed out has, in its natural or healthy performance, and in the obstacle from rigidity, close analogy with similar processes going on during the premonitory and first stages of labor; and the dismenorrhœal pains have analogy in the irregular painful and useless contractions and pains of these stages of labor, and of the hours immediately following delivery.

No other disease—local, or presumably local—has such importance in the theory of sterility as spasmodic dysmenorrhœa. This great place is established by the frequent association of the two conditions, and by the probable connection of the dysmenorrhœal neurosis with profluvium seminis, with disorder of sexual desire and pleasure, and with other derangements of the sexual orgasm of coitus. But dysmenorrhœa has its place confirmed in a unique way, for its cure is universally admitted to be a distinct and direct step towards the cure of sterility, and this can be said of no other local condition.

During recent times, no disease has more engaged the attention of gynecologists than the catarrh and peculiar changes of the cervix uteri connected with it, known generally by the name of ulceration of the neck of the womb. To it, even when in a very slight form, has been ascribed a very great pathological importance, and the Croonian Lectures of West seem to have had less effect in bringing the profession to a just judgment of its comparative insignificance than the overshadowing influence of some other temporary novelty. Among other evils which this very prevalent disease has been alleged to produce is sterility; but there is not a tittle of evidence that it has any special influence in preventing conception; and we have, for guidance as to this matter, our best help in the fact that conception and natural pregnancy are extremely common during its continuance. Among twenty-six cases observed by Grünewaldt, with a view to the study of the changes of the cervix uteri in the first month of pregnancy he found only eleven with a quite healthy state of the cervical mucous membrane. Six had papillary and nine catarrhal ulceration, which no doubt existed before conception.

Almost identical statements may be truly made regarding versions and flexions, and I do not repeat them. But in this department of gynecology increase of knowledge not only tends to diminish importance, but to show that the great mass of versions and flexions are conditions of simple health.

The importance of those diseases which prevent the commencement

of uterine pregnancy, or render such commencement improbable or difficult, needs only to be mentioned. To Grünewaldt we owe a careful statement of the extent and potency of this class of diseases, and for them he, as already said, vindicates a morbid superiority over those conditions which prevent conception.

These diseases and disorders of the genital organs, whether they act in preventing conception, in preventing uterine pregnancy, or in interfering with its natural healthy progress, are operative in individual cases, and demand the most careful study of the practical physician, for it is chiefly through his power over them that he can hope to cure sterilty. That in early stages of the study of these diseases their influence should be exaggerated is natural. At all times there can be no doubt their study and treatment will be most important, not only on their own account, but with a view to the improvement of the general health. In the case of those local diseases which may be proved to have no special influence in diminishing fertility, their removal, by increasing the general health, will help towards a removal of sterility.—*British Medical Journal.*

Dr. Matthews Duncan on Sterility.—In the course of the third Gulstonian Lecture, Dr. Duncan, observes: "It is scarcely an exaggeration to say that, in recent practical works on sterility, there is exhibited entire ignorance or entire neglect of the laws of fertility. Every woman from fifteen to forty-five is regarded as likely to breed. If she be sterile, a cure is at once set agoing; and, if a child be not born, the failure is not debited to the nature of the case, but to the want of ingenuity in the doctor. A reputation for curing sterility is spoken of as if it were founded on substantial claims. The prevalent methods of curing sterility are founded on an implied theory that it in most cases arises from impediments in the way of the spermatozoa reaching the ovum. Without sufficient evidence, strictures are assumed to exist, versions and flexions of the womb are held so to distort the interior passage as to prevent progress of the spermatozoa, cervical catarrh is believed to stop them by mechanical obstruction or by chemically poisoning them; and for these real or imagined evils sterile women are made the subject of treatment. It is the theory of mechanical obstruction that, by its simplicity and directness, has possessed the profession and the public; and accordingly many operations and modifications of operations, and very many instruments, have been devised to do away with the obstruction. The theory has had real rational support in the fact that dysmenorrhœa of a spasmodic kind does, as already shown, frequently accompany the sterility, and in the supposition that the same obstruction which causes sterility by impeding the entrance of semen, causes also dysmenorrhœa by impeding the exit of menstrual blood, or *vice versâ*. It has had still more satisfactory

support in the observation that the cure of the dysmenorrhœa does occasionally bring with it cure of the sterility.

"The very zeal with which the mechanical theory of sterility has been fostered, and its treatment in many ways persued, has led to its present decadence, and there is now increased attention paid to other departments of fertility and conception. Especially and justly, the difficulties of naturally starting and healthily continuing pregnancy are brought prominently into view. The mechanical obstruction theory has begun to shrivel, because of the impression produced by the enormous, though inexactly ascertained, proportion of the failures of the attempts to cure founded on it. Even the ignorant sterile women could see that, if the theory of causation were true, there was an easy and plain theory of cure; and they could also see that the failure of the so-called cure was prejudicial to, if not destructive of, the theory. The importance of the difficulties of pregnancy now brought into prominence will, on account of its great reconditeness, be received with no enthusiasm, such as welcomed the obstruction theory; and the physicians who entertain it can offer no such brilliant prospects of cure to their confiding patients. It is, however, a decided step of progress in a subject of great practicible importance.

"It is in Germany that this department of sterility has been chiefly studied, and Grünewaldt of St. Petersburg is its best exponent. Recognizing the importance of this work, I take the liberty of using it to show the great incompleteness of even the most advanced accounts of the subject. For Grünewaldt, sterility is truly never a disease, but a symptom of a disease. Nature has, he says, set no limits to female breeding other than the natural changes in the sexual organs that are observed in the senile state. Sterility is one of the most frequently occurring disturbances of function caused by diseases of the female sexual organs. In these views, and his whole work, it is implied that sterilily depends on disease of the sexual organs, including chiefly endometritis, mesometritis, perimetritis, and parametritis. The difficulties of conception, he says, have only a slight importance, compared with the disorders of the more important vital processes of pregnancy, and these disorders affect chiefly the tissues of the uterus."—*British Medical Journal.*

Rapid Dilatation of the Cervix Uteri.—In a paper read before a recent meeting of the Medical Society of the County of Kings, Dr. John Ball called attention to a report submitted by him in 1873, in which was contained some quite remarkable results in stricture, chronic endo-cervicitis, conical cervix, flexions, sterility, etc., by rapid dilatation of the cervix. He now reports that in the interim of ten years his experience has confirmed him in the views then expressed. In the treatment of such cases,

rapid dilatation has entirely superceded tents, the knife, scissors, curette, etc., in his practice. He reports additional cases of dysmenorrhœa, chronic cervical endometritis, menorrhagia and metrorrhagia, in which this method of relief was resorted to with very remarkable success. The operation is performed under an anæsthetic. The dilator having been carefully introduced, is operated by means of a screw as will be readily understood by a reference to the cut, and the canal divulged in all directions to the extent of the capacity of the instrument. The pessary is then

introduced and kept in position for a week, the patient being kept on her back the while. Dr. Ball considers his plan quite as safe as any other successful method.

The accompanying cuts (kindly furnished by Messrs. G. Tiemann & Co., of New York) represent the principal instruments employed in the operation. They scarcely require any explanation. The speculum is self-retaining, and is claimed to possess advantages over other speculums in that it gives more room and freedom to the operator, and from the fact that

it can be converted easily into a two-bladed instrument, by removing the third blade, when it can be used for the rectum also.

Some Points in the Reparative Surgery of the Genital Tracts.—Dr. M. A. Pallen, of New York, in a paper on this subject, writes: All fallings of the uterus, regard to its position from the slightest prolapse to the completest procidentia, necessarily involve more or less folding of the vagina upon itself; and, should the substructure, the perineal conjunction, be absent, the process of vaginal folding ultimately becomes complete inversion. Without the necessary amount of time to properly discuss the relations of vaginal dislocations to the perfect integrity of the perinæum, I propose to formulate certain propositions.

1. Should there be perineal laceration, even if the uterine structure and circumuterine spaces be perfectly normal, the organ, sooner or later, necessarily sinks in the pelvis, most frequently in retroversion.

2. All perineal lacerations, from a simple submucous muscular sundering (of the transversus perinæi, sphincter, and levatores ani conjunctions), to a rent that extends into the bowel, necessarily beget vaginal dislocation, primarily as a slight, later as a complete rectocele, to be followed by a prolapse of the anterior wall, causing urethrocele and cystocele.

3. Urethrocele and cystocele seldom occur spontaneously; they ensue from pressure above (very rarely), or they follow from perineal sundering or laceration. I have never seen a case of cystocele, or even much uretorocele, that was not associated with some prolapse of the posterior vaginal wall.

4. All operative procedures for the suspension of a prolapsed uterus must be directed mainly to the posterior vaginal wall, because it arches upon the perinæum below and the uterus above, serving chiefly as a column of support. The anterior vaginal wall, being straight and shorter, serves rather for the support of the urethra and bladder, and being adherent to the pubo-vesical spaces, it prevents the full bladder from rolling the uterus in retroversion.

5. Operations restoring the integrity of the perinæum and posterior vaginal wall, usually develop symmetrical correlations of the canal. In cases of complete procidentia, a perinæum restored by plastic procedures which strengthen the recto-vaginal septum will eventuate in a permanent cure, a condition I have never seen in making operations confined strictly to the anterior vaginal wall.

These propositions assumed, I feel satisfied that very many successful issues of perineo-vagino-plasty prove that the theory upon which the operation was based is correct, viz., that the conjunction of the transversus perinæi, sphincter ani, pubo-ischio-coccygeus, and levatores ani muscles, (described, but never actually demonstrated as the perinæum)

is the true and correct foundation upon which the posterior vaginal wall rests, and that the support rendered by the connective tissue in front of the rectum is but secondary, in consequence of the variable calibre of the bowel. The anterior column of the vagina is straighter and shorter, and, as before said, mainly supports the bladder and urethra; but the posterior vaginal column, added to the masses of blood-vessels furrowing the peri-vaginal connective tissue, tends to support the uterus; therefore, when the basement support of the vagina (perinæum) gives away, it folds down upon itself, and drags the uterus in retroversion. I would state *en passant*, that I exceedingly doubt the efficacy of the so-called ligamentous support of the uterus, farther than the mis-named structures (broad ligaments) serve as vehicles for carrying masses of erectile tissue and blood-vessels; and that in the healthy female the uterine body maintains its normal plane, or it is lifted, or it is depressed therefrom, in consequence of plentitude or emptiness of these same blood-vessels. Furthermore, I am disposed to think that all misplacements, except from direct or mechanical causes, depend upon fracture or destruction of the connective tissue in the circumuterine spaces, because of pathological changes in the blood-vessels.—*British Medical Journal.*

Pilocarpin in Puerperal Eclampsia.—Dr. Cantilena reports a case of a woman unconscious with puerperal eclampsia. There was slight œdema and albuminuria. Many measures had been unavailingly tried, and there were little hopes of recovery. A hypodermic injection of ⅓ of a grain of muriate of pilocarpin was given and repeated in five hours. There was abundant perspiration and salivation, with marked improvement. The injection was repeated twice on the ensuing day, and a perfect recovery.—*Medical and Surgical Reporter.*

III.—DISEASES OF CHILDREN.

Infantile Paralysis.—By Charles Nelson Gwynne, B.A., M.B., M. Ch., T.C.D., in the *Medical Press.*

Mr. President and Gentlemen,—Though I cannot give you in connection with this subject any original researches of my own, yet for various reasons it is a subject which ought to be an interesting one for discussion. The clinical features of the disease have not, till comparatively lately, been recognized, or rather differentiated; the pathology also has up to a recent period been practically unknown; and the treatment adopted, before the disease became to a certain extent understood, was either *nil*, or in many instances injurious, and even after a fairly accurate, as far as it goes, basis of its pathology had been laid, the modes of treatment suggested showed anything but a unanimous consensus of opinion. In fact, in this, as in many other forms of disease with which we are

brought face to face, we have, I fear, to confess that treatment has very little influence upon the course of events, and that the issue is arrived at almost irrespective of our efforts. On the other hand, infantile paralysis is a disease which is not uncommon in the experience of most general practitioners, and it cannot fail to be interesting to find out in the course of the debate, what clinical features have predominated in the experiences of individuals present, and what course of treatment has been found by each most favorable. Amongst the many diseases that entail deformity, and Sheffield, I am sorry to say, has its full complement of such, there are none which present such sad and hopeless characteristics —to the parent whom a sad fate compels to witness it in their children, to the stranger who suddenly in the street comes across the youthful cripple with a withered arm or leg, or to the physician who has to view the same in a hospital, and, in the majority of cases, to confess his skill unavailing. The name of the disease as it is usually known in this country, viz., "infantile paralysis," is unfortunate and misleading, for it is not, as the name would imply, the only form of paralysis that occurs in children; and even if it were it is not confined to the period of infancy, but attacks persons of any age; and it is akin to a form of paralysis that is by no means uncommon in adults, to which Duchenne has applied the name of "progressive muscular atrophy." How very little has been till lately known of the nature of this disease will be evident from the fact that it was not till 1860 that Von Heine first described its clinical features, and it was not till 1870 that the pathology of the disease began to be understood. Our principal knowlege of the pathology of infantile paralysis has been derived from the observations of Cornil, Prevost, Lockhart Clarke, and after them, of Charcot, Vulpian, and Professor Erb.

Though infantile paralysis or acute anterior polio-myelitis, a name proposed by Professor Kussmaul, has been observed at almost every period of life, yet we cannot but recognize the period of youth as a predisposing factor. Most of us have seen cases of it in children which from time to time come under our care, but few, perhaps not one of us here, has seen an acute case in an adult. The more chronic form of the disease, viz., progressive muscular atrophy, has no doubt been familarized to most of us, if not in private practice, at least in the wards of an hospital. If we look back and recall the history of cases that have come under our own observation, the first thing that will strike us is the apparent want of any efficient *cause* for the attack. I am sent for to see a child, it is probably teething, but otherwise is healthy, as far as outward appearances go, the mother tells me that she put it to bed all right and in perfect health, and in the morning on taking it out of its cradle she finds one leg helpless, or an arm, or both. The child itself does not seem much the worse for the catastrophe, but takes his food much as usual and does not afterwards deteriorate in health. The above is all the his-

tory which can be got at in a large number of cases, and was in fact the history, and the only history I could get in an old case of a boy named Haslam under my care last month, where both legs below the knee were paralyzed, the right retaining some slight power of motion. I am aware that it is laid down that the paralysis in typical cases is ushered in with fever and restlessness, but I can only recall one case where I was called in sufficiently early enough to take note of the fever, and in the other cases that have come under my care there may have been the initial fever, but I could not satisfy myself on the point either from the condition of the patient or from the history. On this point of initial fever I would solicit the opinion of those present who have had cases of infantile paralysis under their care. Charcot regards the fever as the usual precursor of the paralysis, and most of the text-books follow his example, but in the few cases I have seen I have failed in the majority of them to obtain any history of high temperature. After the draft of this paper was written I happened to take up West on the "Diseases of Children," and I find he lays little stress on the initial fever, and makes it rather the exception than the rule.

From statistics gathered from various sources I find that in nearly half the cases the lower limbs are the affected parts; of the remainder the majority represented implications of the arms and legs, or arm and leg, and a very small number the upper extremity alone. There are few features of the disease so interesting in the pathological point of view as the atrophic changes that gradually supervene—the wasting or withering of the limb, which is not confined to the soft structures alone, but also effects the bones. This would suggest that portions of the nervous system are involved that preside over nutrition. Let us compare (side by side with this remark) the deformities that characterize infantile paralysis with the large number of deformities which we witness in rickety children, the latter in many instances presenting more or less partial paralysis, and the notion is apt to occur whether the deformities which characterize rickets may not be due to lesions of a somewhat different character affecting the same portion of the trophic nerve system. But this is by the way.

As regards the cause of the disease, then, I fear we must own that we know nothing whatever of the subject. All the investigators, it is true, assign some cause, such as teething, measles, scarlatina, malarious fever, convulsions, heredity, but when such a variety of wholly distinct causes are assigned which possess no feature in common, I think we are warranted in thinking that they are not causes at all, but merely concomitant or accidental. Heredity, I believe, has a distinct influence in the production of the disease; but, after all, it is only after a very loose or popular mode of expression that we can consider "heredity" in any sense a "cause." As regards the etiology of the disease, we must, I fear, at

present rest content with the very general statement that early life, and and especially the period of dentition, is especially liable to disorders of the cerebro-spinal system, and as, from apparently very slight causes, we find convulsions the cause of death in the case of numberless infants apparently robust, so we see an affection of the spinal system with, to all appearance, as little cause producing temporary or permanent paralysis.

I had hoped to show you, under the microscope, some sections of spinal cords taken from patients that have been the subject of infantile paralysis, but I have been disappointed at the last moment in obtaining them. Supposing such a section to be put under the microscope, in the majority of cases you would see an atrophy or shrinking of the anterior grey substance on one side or both, and a paucity, or entire absence, of the large nerve cells, and if any remained they would probably be shrunken, and present some pigmentary changes. The axis cylinders in the same anterior cornu would be few in number and partially wasted, and their place supplied by fibrous-tissue fibrils; the capillaries would probably be numerous and large, though sometimes the reverse. The anterior lateral column would probably be smaller in diameter than on the opposite side, and the nerve fibres going to the anterior nerve roots would be deficient with some connective tissue-fibres filling their place. In fact, very much the same state of things as is described in cases of progressive muscular atrophy. Why then, I should like to know—and I would be very glad if some gentleman present would suggest—Why, in the latter disease, the affected limbs react normally to electrical stimuli; and in infantile paralysis galvanic reaction is either wholly or partially lost? Gentlemen present will please note this point. We may sum up then, the appearances of cord sections in infantile paralysis as suggesting a "sclerous atrophy of the anterior cornu of grey matter, with disappearance or shrinkage of the large motor cells, and some hyperplasia of the neuroglia connective tissue; with occasionally secondary emaciation of the adjoining white column."

Let us now turn our attention to the limbs, and first let us consider the muscles. Of course, we have loss of heat and atrophy. The first inquiry here that will suggest itself to us to make is, What is the cause of the atrophy? Is it due merely to their not being called into action? Or is the atrophy as much a feature of the disease as the paralysis and dependent upon the changes in the nerve centre? The latter seems to be the most probable, as we see the atrophy extends to the osseous system as well, and because we see in some cases it forms one of the earliest phenomena of the disease. This suggests the question of the utility of topical remedies, such as rubbing, massage, electricity, beating, etc. Here again, in the muscle lesion, we observe a marked contrast to the order of sequences that obtain in the cognate disease "progressive muscular atrophy," for while in the former the paralysis always precedes

the atrophy, in the latter the atrophy precedes the paralysis and determines the amount of it. This point I would also ask gentlemen present to note, and offer, if possible, some explanation of.

Let us now examine a piece of affected muscle under the microscope, and what to we see? If we take it during the earlier period of its degeneration, we will see simple atrophy of the muscle fibres, some sarcolemma nuclei scattered in clusters between the fibrils, some loss of striation in the muscle fibres, and hyperplasia of the connective tissue; if we examine it after the atrophy has reached its intensity we will find much fatty degeneration, an entire absence in parts of muscle bundles, and a substitution of fatty material.

A curious example of the defective development of the limbs affected by paralysis infantalis presented itself at the Children's Hospital, Brookhill, some time ago, in the case of a girl, Lydia Holmes, æt. 5 years. At the age of about ten months, according to her mother's statement, she suddenly lost the use of the left arm and leg, not altogether, but retaining some slight power of movement. After a while she regained to some extent the strength in the affected parts, but they never reached the standard of development of the other limbs. I found on examination that the left arm and leg were both thinner than their fellows, and on measurement, that the left arm was nearly an inch shorter than the right arm, and the left leg half an inch shorter than the right leg. The hand, too, was smaller in diameter across the palm, and the same applied to the foot. She could walk fairly, limping a little, and showing evidences of weakness in the affected leg, and she could not grasp firmly with the left hand. In other respects she was perfectly healthy. She never had convulsions, nor was there any history of any illness or noticeable symptom prior to the appearance of the loss of power. There did not appear to have been any treatment whatever directed to her case. Having alluded to some of the most interesting features in the clinical history and pathology of the disease, I now arrive at what, after all, is the most practically important to men like most of us who are called in, not so much to gratify our scientific tastes in diagnosing and observing, as to cure our patients. And here my limited experience is not comforting. Advisedly, I think that treatment does do some little good in some cases, especially in those cases where Nature is going to effect some repair of the mischief of her own accord. In such cases, by a variety of measures directed to keeping up an artificial exercise of the muscles of the affected parts, and supplying artificial heat, we may delay the degenerative changes going on in the muscular tissue until such time as the nerve centres, becoming restored to health, supply the natural centrifugal nerve stimulus. To carry out this line of treatment, a variety of expedients have been recommended. Friction, kneading, massage, shampooing, and electricity have all been recommended, and

are, no doubt, useful, and a gentleman named Klemm has invented a very pretty little apparatus for beating the affected muscles. It is made of wood, and has to be vigorously applied, and when we consider that there is no loss of sensibility in this disease, I have no doubt but that its application is contemplated by the suffering infant with feelings particularly enjoyable. On the whole, friction with the hand, keeping the limb warm by a casing of cotton-wool, and the application of electricity, sum up the most rational treatment in chronic cases. A toy called the "baby-jumper," which he does not condescend to explain, is highly recommended by Dr. West. . . .

In using electricity a good deal depends on the method of its application. First, as to the kind of electricity to employ. In bad cases we find faradization of no use at first, for the simple reason that the muscles will not respond to it; on the other hand, in many cases where the former has failed, the application of galvanism will induce fairly strong muscular contraction, so that we may adopt it as our rule in practice to commence with galvanism, and when the muscles are so far improved as to respond to the faradic current, to call in its assistance also.

Early in last month I admitted Edith Stocks, æt. three years, into the Children's Hospital, suffering from paralysis of both legs practically complete. In her case, too, there was the sudden seizure, but no history whatever of previous fever or indisposition. The muscles of the legs were much wasted, and the feet and legs hung and swung about like flails. I applied the faradic current without the slightest contraction being induced in the muscles. I then employed galvanism, bringing into action first ten, and then twenty cells. The former failed, but the latter induced contractions, the legs being drawn up to the body, and the feet extended. Since that time the galvanic current has been employed at first twice a week, and afterwards daily, with, I think, some very slight improvement, but of course it is too early yet to estimate the value of the treatment. The best method of applying the galvanism is to place the anode or positive pole over the spine, at the seat of the disease, and the negative or cathode over the limb, or the nerves that supply the affected parts close to their exit from the canal of the spine. The positive, or the pole applied to the spine, should be stationary, but the negative can be either fixed over the nerves going to the limb, or moved up and down over the affected muscles—the labial method. After some months, or a year or two's perseverance in this treatment, the patient surgeon or parent will probably be rewarded by some signs of improvement. A judicious use of the induced current also will be of benefit. At the same time, the general health should attract special regard, and special nerve tonics should be administered. So far for the treatment of chronic cases where there is atrophy of the limb. In the early or acute stage more vigorous medicinal treatment should be employed. Dr. Althaus recommends the

injection of ergotine, one-fourth gr. for a child a year old, hoping thereby to cause contraction of the blood-vessels of the part, and so deplete its blood-supply. He also stimulates the muscles as they become affected with injections of strychnia. Other natural remedies in the acute stage are cupping, leeches, iodide of potassium, blisters, etc.

Tonsillotomy in Children.—Referring to the operation for the removal of enlarged tonsils, effecting the physical growth of children, Dr. W.H. Daly says in *The Medical Record*, February 10, 1883, that it has always in his experience been most positive and flattering in the highest degree ; so much so that he never hesitates to assure the friends that they may look for improvement in the physicial status of the child, and he is never disappointed, especially if proper treatment is carried out with reference to the cure of concomitant catarrhal disease of the naso-pharynx.

Editor's Table.

Medical and Surgical History of the War of the Rebellion. Our thanks are due the office of the Surgeon General for the Medical and Surgical Volumes of Part Second, and the Surgical Volume of Part Third, making our set complete to date.

Dr. Thad. A. Reamy, of Cincinnati, is made Chairman of the Section of Obstetrics for the coming meeting, to be held in 1884 at Washington; Dr. J. T. Jelks, of Arkansas, is Secretary. We shall look for a wide awake address next year, and a live contribution from the Section.

Dr. Bartlett's Address.—As Chairman of the *Section on Obstetrics* at the recent meeting of the American Medical Association, Dr. Bartlett, of Wisconsin, made the regular address, giving an excellent review of obstetrics and gynecology.

Of *Emmet's operation*, while he repeats in general terms the accepted approval of the profession : he yet says—that prolonged observation has shown that undue influence was attributed to the lesion, and experience has proven that the relief claimed to follow the operation is not uniformly attained.

Most of the indications which have been claimed to warrant *Battey's operation* are now generally admitted. Some doubts exist with reference to the ultimate results when performed to check uterine hemorrhage, as produced by myomata. And some diversity of opinion concerning its efficiency for relief of epilepsy, and mania seemingly dependent upon or associated with ovarian troubles.

The treatment of extra-uterine pregnancy was alluded to, and the address

claimed that some important advances had been made by resort to *Tait's operation*. Reports also of cases were given in brief from Lusk, Emmet, Thomas and others, where electricity was employed as a means of treatment.

Transfusion in post partum hemorrhage, where death seems imminent, is not so confidently resorted to: French, English and German authorities do not any longer have much faith in its practical efficacy. And Dr. Lusk is quoted as saying that although theoretically it is the most rational method of treatment, practically it is unsatisfactory.

The obstetric forceps comes in for a share of attention, especially with reference to certain "latest additions, presented by Dr. Duke, of Dublin." These additions consist of certain tractors which afford an "immense gain of power for shortening labor." Dr. Duke considers that there is more chance for the child, and less risk to the soft parts of the mother, by pulling the head forcibly through the pelvis, than if allowed to remain and mold itself to the outlet. Dr. Bartlett humorously, but forcibly comments, that he thought that we should probably hear of a small electro-motor of one horse power, so arranged as to do the pulling, and save the mother, as well as the operator, any exertion.

As to the *use of ergot in labor*, Dr. Bartlett said that he had administered this drug for many years in cases not very frequently seen—when the second stage of labor was retarded by insufficient contraction and no pelvic obstacles existed. He regards it as a valuable resource in such cases, and has never witnessed, in his own practice, the tetanic contractions attributed to it since he learned how to employ it. For this purpose he uses an infusion of the freshly and coarsely powdered kernals, about thirty grains to three drachms of water, giving a tablespoonful every thirty minutes until some effect is apparent.

In some cases the effect is obvious after one dose, in others two or three doses are required. In cases of nervous exhaustion on the part of the patient a full dose of quinine is also given. It was also added that he had made no use of an anæsthetic in labor, save in some exceptional case of feeble uterine contraction, but where ergot was administered and pains became efficient, the anæsthetic was also used.

Furthermore, as to the *usefulness of an anæsthetic in labor*, he thought the contrariety of views entertained, grew out of the faulty administration by those opposing. He alluded to the several degrees of anæsthetic effects which may be produced, and considered that in labor it was rarely necessary to produce more than its first effect. Dr. Bartlett thinks there is no proof that used in this proper manner, anæsthesia produces or tends to produce post partum hemorrhage.

Of *the dangers attending iutra-uterine injections*, the address dwells at some length. To some extent it combats the views of Dr. Barnes as to the precautionary measures needful to prevent septic poisoning. He

thinks the advantageous results attributed to carbolized injections, vaginal or intra-uterine, do not so much depend upon antiseptics as upon the cleansing effects by even a simple fluid, used in such a manner and quantity as to secure entire removal of any decomposing matters retained in the uterine or vaginal canal.

In conclusion, Dr. Bartlett referred to the necessity for careful constitutional treatment in pelvic disease, stating that it had often been observed, but that it had not received the attention which its importance demanded. Specialism, when exclusively practiced, is apt to produce narrowness of views.

Bibliography.

Medical and Surgical History of the War of the Rebellion: Part III. Surgical Volume. Prepared under the direction of Joseph K. Barnes, Surgeon-General United States Army. By Geo. A. Otis, Surgeon U. S. Army, and D. L. Huntington, Surgeon U. S. Army, Washington. 1883.

This volume, which completes the surgical portion of the whole work, is presented in the same magnificent style and fullness of editorial supervision as characterize the preceding volumes. As one of our cotemporaries very fitly says, this volume is moumental. Two of the distinguished surgeons whose names appear on the title page have closed up their labors and passed away. Surgeon Geo. A. Otis died some months since, and Surgeon General Barnes, having retired from his official position, died just as the volume was being issued from the press.

The volume contains over 1,000 pages of matter and is illustrated in the highest style of art; the chromo-lithographs being simply superb. The work—this volume, and the whole series, reflect great credit on the medical corps, and afford unique material for reference that can be found nowhere else.

The Microscope and Its Revelations: By William Carpenter, C.B., M. D., L.L.D., &c., &c. Sixth Edition. Illustrated by Twenty-six Plates and Five Hundred Wood Engravings. Volume I. and Volume II. New York: William Wood & Co., 56 and 58 Lafayette Place. 1883.

These two beautiful volumes are a fresh edition of D. Carpenter's well known and complete work on the microscope, and constitute the fourth and fifth of the series of Wood's *Standard Medical Authors* for the year 1883. They will add very much to the value of volumes for this current year.

The topics treated embrace everthing that the student or the *amateur*

care to find in such a work. The *construction*, *apparatus*, *management*, *mounting*, etc., of objects. To all which is added studies of objects in *vegetable* and *animal*, with applications to *geology* and *mineralogy*. Everything is abundantly and beautifully illustrated, and in all respects the volumes, like those of the preceding series, are gotten up in excellent style.

The Human Laboratory is the title of a synoptical sheet of the study of animal chemistry. Prepared for the Freshman Class of Ohio State University by Prof. Sidney A. Norton.

The chart begins with the eighteen elements, gives their disposition in the animal economy, and the final results, or products. Prof. Norton makes this marginal note in conclusion: "The apparatus is a living machine, governed by an immortal soul, working for itself and for others. The machine finally wears out, leaving about seven pounds of lime salts to the hundred, and a memory—deathless for a chosen few; weak and fugitive for the great majority. Nevertheless, life is worth living if we have the approval of a good conscience."

Gossip.

The Divine Origin of Cowpox.—The *Lancet* copies the following impromptu verse from a London secular paper:

When Io's charms had amorous Jove estrang'd,
Saturnia to a cow her rival chang'd;
Then Venus cried, "The beauty you deface
Shall shield the beauties of a future race;
Her favored offspring shall from earth remove
The direst foe of beauty, life, and love!"

Ancient mythology is as mixed and uncertain in its history as modern theology is in its theories, but the erudite and versatile Mr. Punch, who is seldom wrong on any point, tells us "Io–dide of potash." We should like to ask Mr. Punch, did Io–dine on potash and die of a surfeit of this salt, or did she take it for lethal purposes, or did she get a toxic dose of it while seeking relief in it from tertiary troubles?

Any thing relating to the Goddess Io, the fair white heifer from whose lovely udder vaccine came, according to the verse above quoted, is of interest.—*Louisville Medical News.*

Heroic Midwifery.—The following illustration of what ignorance and boldness may achieve under the seal of the profession is found in the latest edition of Leishman's Obstetrics: A practitioner in a remote district having performed the operation of turning, experienced such diffi-

culty in getting the head through the brim that he called in the aid of a medical friend. Under the influence of vigorous efforts, thus reinforced, the body of the child was brought into the world minus the head. After repeated failures to deliver the retained head, the two operators held a council, and after due and solemn deliberation resolved to perform, and actually did perform, what?—the most ingenious and speculative reader can scarcely conceive it—the *cesarean section?*

Resignation of Prof. Wallace.—Prof. Ellerslie Wallace has resigned the Chair of Obstetrics and Diseases of Women and Children in the Jefferson Medical College on account of ill-health. His successor has not as yet been elected, but the following gentlemen have been nominated for the vacant chair, at a meeting of the Trustees held last Monday evening; Drs. A. H. Smith, Ellwood Wilson, and F. H. Getchell, of Philadelphia; J. C. Reeve, of Dayton, O.; Theophilus Parvin, of Indianapolis; and E. W. Jenks, of Chicago. The election, it is understood, will be held on June 25.—*Medical News.*

In a discussion by the Obstetrical Society of Washington on the induction of premature labor, one of the speakers remarked that he had heard a professor of obstetrics tell his class that he "believed the time would come when fashionable women would have their children at any time that suited their convenience during the last four weeks of pregnancy." What will the fossils who used to maintain that there was such a thing as "meddlesome midwifery" say to this?

"I EXPECT I can report a case of the youngest grandmother in this country. Mrs. C. was born 1854, married 1867; a daughter was born in ten months afterward. The daughter married in 1882, and in March of this year, I was with her at the birth of her nine-pound boy. The youthful grandmother, not quite twenty-nine years old, was also present."—R. S. Stanley, M.D., in *Louisville Medical News.*

Intra-Uterine Vaccination.—Dr. Truzzi vaccinated a number of pregnant women during the last three months of gestation, with a view to determine the protection, if any, afforded to the child. The results were negative, as the children were all successfully vaccinated a few days after birth.—*Centralblatt für Gynäkologie.*

A surgeon once jeeringly asked a Quaker if he could tell the difference between "also" and "likewise." "Oh, yes," said the Quaker; "Sir William Fergusson was a great surgeon—his skill as an operator was admitted by almost every one. You are a surgeon 'also,' but not 'likewise.'"